

THE
AGRICULTURAL BULLETIN
OF THE
FEDERATED MALAY STATES.

No. 6.]

MARCH, 1918.

[Vol. VI.

TOBACCO TRIALS.

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TOBACCO has long occupied a place in native agriculture but only to a limited extent. Judged merely from the results of the native cultivation the outlook for the successful production of the crop would appear to be distinctly unfavourable but the native hardly ever thinks in terms of actual return for labour expended, is uneducated in the details of the art of the culture and is handicapped by the dearth of good strains.

TRIALS IN 1917.

At the suggestion of the Chief Secretary and with a view to stimulating the native culture a comprehensive set of trials was made during the past year having for its objects:

- (1) the testing of the better strains of imported stock ;
- (2) the isolation from them of strains likely to prove successful in this country ;
- (3) the distribution of tested seed to native cultivators ;
- (4) the education of the native in the details of culture.

A number of importations of seed from various tobacco-producing countries was made, the selection of these varieties and the collection of stock being in the hands of the Economic Botanist, Federated Malay States, who made the following remarks :

"The primary object was for trial against the native material and the isolation from them of strains which would prove of utility to the natives in different parts of the Peninsula. At the time the importations were made, it was realized that it would be impossible for some time to extend the work from the point of view of actually testing the crop from its commercial aspect. This, however, will be done as soon as it is possible to develop the scheme of experimental farms, now under consideration, and in the meantime, work will be prosecuted on a small scale."

The trials of which this report deals were carried out at Kuala Tembeling, Pahang ; and at Juasseh near Kuala Pilah, Negri Sembilan. The tests were, therefore, conducted on two entirely different types of soil. The land selected at Kuala Tembeling was a portion of the area of volcanic, probably andesite origin, on the Kuala Tembeling Government Plantation. That at Juasseh was on land typical of such an extensive area in this country, composed largely of laterite. It may be pointed out in passing that the constitution of the soil in which natives would have to plant tobacco

more nearly approaches the Juasseh type than the Kuala Tembeling, which latter is peculiar to but a small proportion of the country. The mechanical and chemical analyses of these soils is given in Tables I and II.

TABLE I.
*Mechanical Analyses of Soils at Kuala Tembeling and Juasseh.**

—					K. Tembeling.	Juasseh.
					Per cent.	Per cent.
Coarse sand	...	...	...	...	23.5	38.3
Fine "	...	...	...	...	14.1	
Coarse silt	...	...	...	...	14.4	
Fine "	...	...	...	...	22.2	48.3
Clay	...	...	...	...	14.8	
Moisture	...	...	...	...	2.2	4.8
Loss on ignition	...	...	...	...	6.4	8.6
" analysis	...	...	...	...	2.4	
					100.0	100.0

TABLE II.
*Chemical Analyses of Soils at Kuala Tembeling and Juasseh.**

					K. Tembeling.	Juasseh.
Insoluble in hydrochloric acid	...			...	65.00	67.00
Nitrogen	...	...	...	...	0.115	0.126
Potash	...	...	...	...	0.425	0.320
Phosphates	...	...	...	...	0.107	0.035
Lime absorption	...	...	...	...	Nil.	0.303

The land at Juasseh was newly felled and cleared land, and at Kuala Tembeling, land that had been cleared for some years, but had been fallowed.

The average figures of the most important soil constituents in the tobacco districts of Sumatra are instructive.

TABLE III.
Analyses of Sumatra Tobacco Soils.†

Place.		Nitrogen.	Phosphoric acid.	Potash.	Lime.
Deli	...	0.245	0.12	0.06	0.28
Langkat	...	0.22	0.17	0.13	0.15
Serdang	...	0.187	0.115	0.17	0.20

* Report of Assistant Agricultural Chemist, Federated Malay States, 1916.

† Mathieu, *Sumatra Tobacco*, 1908.

It will therefore be seen that the Kuala Tembeling soil compares very favourably with the best tobacco producing soils in Sumatra, with the exception of the nitrogen, but that the soil at Juasseh is distinctly inferior as regards nitrogen, and more especially in its phosphate content. The Kuala Tembeling soil is very fertile, and as regards its suitability for tobacco cultivation, it is considerably above the average of soils met with in the Malay Peninsula.

RAINFALL.

The following is the rainfall at Kuala Tembeling and Juasseh for the year 1917:

TABLE IV.

Rainfall.

Month.					K. Tembeling.	Juasseh.
1917.					Inches.	Inches.
January	...	...	...	...	10.34	8.47
February	...	...	...	...	5.44	11.28
March	...	...	...	...	11.93	14.35
April	...	...	...	...	3.93	6.97
May	...	...	...	...	4.61	10.39
June	...	...	...	...	4.75	3.35
July	...	...	...	...	3.14	2.44
August	...	...	...	...	10.00	10.73
September	...	...	...	...	5.70	9.00
October	...	...	...	...	8.28	6.11
November	...	...	...	...	9.18	6.05
December	...	...	...	...	11.04	8.19
Total					88.34	97.33

The average rainfall at Kuala Tembeling for the last four years (1913-1916) is 84.06 inches. This is somewhat below the average in many parts of the country. Light rain, continuing the greater part of the day is frequently experienced. This, combined with the very fertile soil, results in conditions favourable for tobacco growing. In this connection, some difficulty was experienced in harvesting the tobacco crop, as not only were the plants in rather a soft condition, but also, moisture was usually on the leaves during the greater part of the day, under which conditions leaves should not be plucked for drying.

At Juasseh the weather conditions are entirely different. Very heavy downpours of rain are usually succeeded by spells of hot dry weather. The abnormal rains experienced in May, resulted in an entire crop of newly transplanted tobacco being washed away.

IMPORTATION OF NEW VARIETIES.

The following tobacco varieties were imported by the Economic Botanist, Federated Malay States, and handed over for trial at Kuala Tembeling and Juasseh. Subsequently, a further consignment was received from Burma, but the present report deals with those varieties received in the first instance.* The germinating capacity was satisfactory, plants of all varieties (with the one exception of E. B. No. 17/17, which failed at Tembeling) were successfully raised and transplanted:

TABLE V.

Varieties of tobacco used in trials at Kuala Tembeling and Juasseh.

Reference No.	Name.	Origin.
E. B. 15/17 ...	Turkish cigarette	Ceylon
E. B. 16/17 ...	Dumbara	"
E. B. 17/17 ...	White Burley, U.S.A.	"
E. B. 18/17 ...	Sumatra	"
E. B. 19/17 ...	Zimmer's Spanish cigar filler	"
E. B. 23/17 ...	Beruang	Philippines
E. B. 24/17 ...	Repollo, "A" 11	"
E. B. 25/17 ...	Type 28	Pusa, India
E. B. 26/17 ...	?	Coimbatore, Madras
E. B. 27/17 ...	Ilathi	Anakapillai "
E. B. 28/17 ...	Godvari Lanka	" "
E. B. 29/17 ...	Gandin	Gujarat, India
E. B. 30/17 ...	Peelin	" "
E. B. 58/17 ...	?	Klaten, Java
E. B. 59/17 ...	?	Kanari "

Of the above varieties, No. E. B. 29/17 failed at Juasseh, and Nos. 58 and 59/17, are grown at Kuala Pilah only, the maturity stage of these two varieties not having been reached at Kuala Tembeling.

TABLE VI.

Dates of cultural operations at Kuala Tembeling.

Reference No.	Seed sown.	Germination.	Transplanted.	Flowering.	Harvested.
15/17	30-4-17	8-5-17	12-6-17	30-7-17	12- 9-17
16/17	"	"	"	12-8-17	7- 9-17
18/17	"	"	"	10-8-17	"
19/17	"	"	"	4-8-17	"
23/17	"	"	"	8-8-17	"
24/17	"	"	"	14-8-17	12- 9-17
25/17	29-5-17	2-6-17	28-6-17	4-9-17	2-10-17
26/17	4-5-17	"	"	14-9-17	"
27/17	"	10-6-17	30-7-17	10-9-17	"
28/17	"	"	"	5-9-17	"
29/17	"	"	"	"	"
30/17	"	"	"	20-8-17	"

* The trial of the Burma tobacco was carried out at Juasseh, but the crop failed in the nursery.

TABLE VII.

Dates of cultural operations at Juasseh.

Reference No.	Seed sown.	Trans-planted.	Flowering.	Harvested.	Seeded.
15/17	23-4-17	26-6-17	31-10-17	3-11-17	17-11-17
16/17	"	"	29- 9-17	10-10-17	25-10-17
17/17	"	"	"	"	"
18/17	"	"	"	15-10-17	2-12-17
19/17	"	"	"	10-10-17	25-10-17
23/17	"	"	27- 9-17	22-10-17	30-10-17
24/17	"	"	1-10-17	18-10-17	"
25/17	"	"	24- 9-17	"	"
26/17	2-6-17	18-7-17	28-10-17	8-11-17	23-11-17
27/17	"	"	24-10-17	"	"
28/17	"	"	3-10-17	26-10-17	15-11-17
29/17	"	—	31-10-17	—	—
30/17	"	18-7-17	"	26-10-17	2-12-17
58/17	17-7-17	23-8-17	"	6-11-17	1- 1-18
59/17	"	"	"	7-12-17	"

Though the cultural methods of tobacco are well-known, it is thought that a detailed account of the methods adopted in the present trials may be of interest. These methods are in all probability almost identical with those practised by the native cultivators in Ceylon; but they vary very considerably from that adopted by the Malay cultivator.

The labour employed in these trials was at Tembeling, Tamil under a Ceylon Tamil mandor, who had had experience in tobacco growing in his native country; and at Juasseh the coolies were all Chinese, under the supervision of one of the writers.

PREPARATION AND CARE OF THE SEED-BED.

The site selected for the seed-bed is on a gentle slope, but free from surface drainage. The beds are raised about six inches above the surrounding soil, and banked with boards. The width of the beds should be about three feet to allow the seedlings to be conveniently attended to. A rich friable soil is made up, by adding a quantity of burnt earth, wood-ashes and a sprinkling of sand to the beds. Soils containing too large a proportion of clay should be made lighter and more open by the addition of humus matter.

Seed Sowing.—The surface of the soil is next brought to a fine tilth. As the tobacco seeds are very small it is advisable to mix the seed with a small quantity of wood-ashes or fine soil, in order that it may be broadcasted with greater uniformity. An ounce of tobacco seed in good condition contains from 300,000 to 400,000 seeds. Seed of each variety is sown, each plot is then carefully labelled and divided off with planks. After sowing, the surface of the bed is flattened down with a piece of board, to ensure the particles of earth being pressed around the seeds.

Shading the Seed-Beds.—In America cheese cloth is used to shade the seed-beds. Shade of some description is necessary, and in the present trials a light cover, formed of "attaps" is laid over the beds on supports at three feet distance from the ground. After the plants have formed several leaves, the shading is removed for several hours every day, and gradually reduced. This is done in order that the plants may become hardened, to enable them to withstand exposure to the sun after transplanting. Artificial watering is frequently necessary, especially should germination commence in a dry spell of weather. The seedlings are ready to transplant into the field when they have formed four or five leaves,—they reach this stage in a month to six weeks from the sowing of the seed. On no account should the seedlings be allowed to become crowded, as such plants will never grow satisfactorily when planted out. All weakly plants are removed and weeding assiduously attended to.

FIELD CULTURE.

Preparation of the Land.—All stumps are removed, and the soil well pulverized. In the trials at Kuala Tembeling, the land had previously been well changkollod, but not manured. Two-foot paths are made at convenient distances over the land, and the soil raised in beds.

Transplanting.—The distance of planting in the present trials is 3 feet by 3 feet. This should be carried out in the early morning before the sun becomes powerful. The plants are carefully shaded with small branches until established. It is generally necessary to water the plants once a day for the first two or three days, unless rain falls during transplantation.

Cultivation.—In three weeks or so from the time of transplanting, the plants receive a mulch of soil around the stems, and the surface soil is lightly stirred. These operations are repeated until within two weeks of the ripening period, by which time the soil has been banked to a height of about eight inches around the plants. All weeds are removed and any dead and sickly plants are replaced by fresh plants from the nursery. In about six weeks from transplanting, the flower buds begin to appear. These are nipped off, and at the same time all lateral growths are removed. After disbudding, a number of suckers will make their appearance at the base of the leaves; these are periodically removed so as to direct the vigour of the plant into the leaves already formed on the stem. Basal leaves of small size are removed, the number of leaves that are allowed to reach maturity depending upon the variety of tobacco. Table VIII shows these particulars of leaf growth.

Mr. F. J. Dupuis, the Manager of the Government Plantation, Kuala Tembeling,—to whom credit is due for careful supervision of the experiments at that place,—tried the effect of growing a number of plants under light shade. The practice of covering tobacco fields with light cloth is in favour in certain districts of Central America. Though a costly operation, this method often proves very profitable owing to the high prices obtained for first class wrapper leaf. Too much shading, however, results in the leaves becoming thin and papery, and it is thought that the leaves produced at Kuala Tembeling under shade suffered from this defect.

DISEASES AND INSECT PESTS.

Considerable trouble was experienced at Kuala Tembeling with certain varieties on account of "wilting." The Acting Government Mycologist, Federated Malay States, reporting on specimens of these wilted plants that were referred to him, said:

"The disease appears to be wilt due to *Bacillus solanacearum*, but work on the spot would be necessary to make quite certain. According to Stevens, no corrective for a field once affected is known. All the usual precautions should be taken to avoid the transferring the disease from one field to another."

It is noteworthy that this disease was never present at the Juasseh trials. This problem would have to be attended to in future tobacco work; the question of soil sterilization by burning being an important factor for consideration, when growing tobacco on a commercial scale in this country.

A small green caterpillar feeding on the leaves was also troublesome on both trial grounds. The pest was destroyed by daily hand picking. These larvæ were at first unobserved on account of their habits of nocturnal feeding and of remaining hidden by day.

A boll worm caused much damage to the almost mature seed pods. This appeared more serious at Juasseh than at Tembeling. Selected plants of each variety for seed purposes were, however, not troubled in this respect at Tembeling, as the flowers were "bagged" previous to flowering to prevent cross-fertilisation.

FIELD RECORDS.

The flowering records, outlined by the Economic Botanist at the commencement of the trials, were taken during the period of growth. The explanation of the headings of Table VIII, are as follows:

- (a) Average height of two fair sample groups of 10 plants in flower;
- (b) Average height of two fair sample groups of 10 plants stopped back;
- (c) Average number of leaves of two fair sample groups of 10 plants;
- (d) Notes on sizes of leaves of different varieties;
- (e) Texture of leaves;
- (f) Colour of leaves;
- (g) Position of leaf on stem;
- (h) Colour of flowers.

TABLE VIII.

Field Records of Tobacco at Kuala Tembeling and Juassch.

Name.	Ref. No.	Average height of plant in flower.		Average height of plant stopped back.		Average No. of leaves per plant.	Average length of leaf.		Average breadth of leaf.	
		E.B.	K.T.	Juas.	K.T.	Juas.	K.T.	Juas.	K.T.	Juas.
			(a)		(b)	(c)	(d)		(d)	
		ft.	ft.	ft.			ins.	ins.	ins.	ins.
Turkish ...	15/17	5½	5	2	...	7	14	12	8	7
Dumbara	16/17	6	7	2	...	6	24	23	12	10
Burley ...	17/17	...	6½	...	...	...	1	17	...	9
Sumatra	18/17	6½	3½	2½	...	8	20	16	12	8
Zimmer's	19/17	6	5	3	...	8	20	19	12	8½
Buruang	20/17	9	6½	2	...	6	27	22	12	10
Repollo ...	24/17	9½	6	2	...	10	23	23	13	10
Type 28 ...	25/17	5½	6	3	...	10	23	19	12	8
"	26/17	6	4	2½	...	8	20	18	17	10
Ilathi ...	27/17	4	4	2	...	10	23	19	12	10
Godvari ...	28/17	4	4½	2½	...	10	19	19	10	7
Gandin ...	29/17	6	...	3	...	12	19	...	10	...
Peelin ...	30/17	4	4½	2½	...	8	22	18	13	10½
Java ...	58/17	...	6½	...	...	...	...	19½	...	11
"	59/17	...	6½	...	...	...	...	16½	...	8½

TABLE IX.

Field Records of Tobacco at Kuala Tembeling.

Ref. No. E.B.	Shape of leaf. (d)	Texture of leaf. (e)	Colour of leaf. (f)	Position of leaf on stem. (g)	Colour of flower. (h)
15/17	Apex acute ...	Smooth ...	Green ...	Horizontal	Small pink
16/17	Petiole fringed and joined to stem	Hairy ...	Light green	Drooping ...	Pale pink
18/17	...	Smooth ...	"	" ...	"
19/17	...	Gummy ...	"	Semi erect	Pink
23/17	Apex obtuse	Hairy crinkled	"	Drooping ...	"
24/17	Apex acute ...	Smooth ...	Dark green ..	" ...	Small pale pink
25/17	" ...	" and re- gular	"	Semi erect	Small deep pink
26/17	Apex obtuse	Smooth and crinkled	Light green...	Horizontal	Large pink
27/17	Apex acute petiole long	Smooth ...	"	Semi erect	Pale pink
28/17	Apex acute ...	" and gummy	"	"	"
29/17	" ...	Hairy and gummy	"	Drooping	Pink
30/17	Apex acute. Crinkled edge	Smooth and gummy	Dark green mottled	Semi erect	Light pink
58/17	Apex obtuse	Gummy ...	Light green ...	"	Large pink
59/17	Apex acute ...	" ...	"	"	"

HARVESTING.

Towards the end of August, or three months after germination of the seed, the plants showed signs of maturity. This is indicated by the leaves turning a yellowish green, and by the appearance of brown spots. The leaves are cut separately as they ripen from the bottom of the plant upwards. Plucking does not commence until after the sun has risen and all moisture has evaporated from the surface of the leaves. The cut leaves are then carried to the store (at Kuala Tembeling the rubber store room was used for this purpose), and strung up on poles to wither and gradually cure. Considerable care is necessary in the curing of tobacco, especially during damp weather, when there is a danger of mould. After the first changes have taken place, more ventilation is given, but the drying process must not be unduly hurried. Drying is complete when the whole of the mid-rib has become brown in colour.

FERMENTING.

When the leaves have become sufficiently dry, which is about three weeks from cutting, they are taken down, tied in small bundles, and carefully heaped on a cement floor. Boards are placed on the top of the leaves and the whole pressed down with heavy weights. The heaps are turned over at intervals to equalize and prevent excessive fermentation. The extent to which fermentation should be carried is undoubtedly a factor requiring elucidation, in the present trials the leaves appeared to be cured in eight to nine weeks.

CULTURAL METHODS EMPLOYED AT JUASSEH.

In the main, the experiments at Juasseh followed closely on the lines of those at Kuala Tembeling, of which an account is given above. Several variations in these methods were necessary at Juasseh to meet the special conditions obtaining at that place.

After the first loss of seedlings through heavy rains, basket planting was resorted to, to ensure that at least some plants of each variety be propagated. The "baskets" consisted of a curled leaf, fastened with a pin, so that the leaf was curled into a cylinder. The bottom consisted of a small layer of clay, above which was placed good friable earth. In these baskets seedlings of four leaves were planted, and remained in the baskets until the roots appeared through the bottom of the clay. Transplantation of the basket and seedlings was then carried out. Good results followed the use of this method, and it might be advisable to give this method a further trial in subsequent experiments. The method was discontinued on the establishment of favourable conditions for the usual methods of transplanting to be employed.

For shading the newly transplanted tobacco, the native method of employing a curled leaf was used. The leaf is curled and fastened with a wooden pin (the mid-rib of a leaf), forming a cone which is placed over the tobacco seedlings. The Javanese tobacco growers recommend a mangosteen leaf for this purpose, as this leaf resists the weather longer than other leaves, and so can be employed on several successive occasions. All covering for transplanted seedlings was removed when it was apparent the plants were established.

The first nursery prepared suffered much from the ravages of crickets, which by burrowing just below the surface of the soil, isolated the seedlings from the water supply. This was only remedied by preparing a second nursery well away from the road reserve, and from the jungle, from which places it appeared the crickets originated.

By comparison of the plant records of Kuala Tembeling and Juasseh (Table VIII) it is seen that in almost every case the plants made a more vigorous growth at the former place than at the latter. This is doubtless due to a great extent to the different soil conditions; but also in part to the fact that at Juasseh about 14 leaves were allowed to mature on each plant.

The harvesting at Juasseh followed the same system as at Tembeling. It is of interest to note that the Malay system of harvesting tobacco is to cut down the whole plant, to remove the leaves, cut, and dry in the sun. This is a mistake. As has been pointed out, the lower leaves mature first, and should therefore be cut first. Furthermore, by cutting the leaves in the green condition and drying in the sun, the aroma of the tobacco is lost. These are points on which the native cultivators require instruction.

At Juasseh, the leaves were dried on the verandah ("serambai") of a Malay house, and with complete success. The subsequent fermenting was done in a large wooden box. Records were taken of the loss of weight in the drying and fermenting process under these conditions.

TABLE X.

Drying periods for Tobacco and Loss of Weight in Leaf during Drying and Curing. (Juasseh.)

Reference No. E. B.	Weight of 100 fresh leaves.	Weight of 100 cured leaves.	Per cent. dry to wet weight.	Days required for drying.
	OZS.	OZS.		
16/17	80	18	22.5	16
17/17	50	11	22.0	16
18/17	61	18	29.5	16
23/17	71	18	25.3	26
24/17	75	22	29.3	30
25/17	72	18	25.0	16
26/17	90	23	25.5	24
28/17	98	21	21.4	14
30/17	45	11	24.4	14
58/17	93	26	28.0	28
59/17	43	12	28.0	24

It will thus be seen that a considerable loss takes place during the process of drying and curing, the extent of this loss depending largely upon the variety of tobacco.

TABLE XI.

Yields of Tobacco Leaf. (Kuala Tembeling.)

Reference No. E. B.				No. of plants harvested.	No. of leaves cured.	Weight of leaves cured.	
						lbs.	ozs.
* 15/17	...	...	...	13	174	1	2
16/17	...	...	...	146	1,424	14	8
18/17	...	...	...	125	524	4	6
19/17	...	...	...	112	699	6	8
23/17	...	...	...	416	1,748	25	12
24/17	...	...	...	196	1,774	21	4
25/17	...	...	...	169	1,949	25	4
* 26/17	...	...	...	79	399	5	8
* 27/17	...	...	...	32	474	3	14
* 28/17	...	...	...	60	684	4	14
* 29/17	...	...	...	86	674	7	15
30/17	...	...	...	162	1,274	9	8
Totals ...				1,596	11,797	130	7

Those varieties marked with an asterisk suffered badly from "wilting," otherwise a considerably larger number of plants would have reached maturity—resulting in a larger crop.

OBSERVATIONS ON THE CURED LEAF.

The Kuala Tembeling trials may be said to have been completed by the end of October. The cured leaf was then forwarded to Kuala Lumpur for the purpose of making sample cigars of each variety; the balance of leaf being sold locally. In the absence of expert opinion it was not possible to make comparisons between the twelve samples of tobacco leaf harvested. Various characteristics were noted as belonging to individual varieties, the chief being the size, colour, texture and aroma of the leaves.

CIGAR MAKING.

The assistance of the local Indian cigar makers was obtained for the purpose of making sample cigars of each variety of tobacco leaf obtained from the Kuala Tembeling experiments. Two kinds of cigar were made, one $4\frac{1}{2}$ inches long,—a fairly large cigar; the other three inches long,—representing the cigar usually in demand by the Tamil cooly. Outside wrappers and fillings of the same sort of leaf was used in most instances. In varieties 15/17 and 18/17, there being but small quantities of leaf harvested, mixed fillings of Ceylon varieties were used to make up the required number of cigars.

TABLE XII.

Cigars made from Tobacco grown at Kuala Tembeling.

Reference No.	Large cigars.	Small cigars.	Weight of large cigars.	Weight of small cigars.	Total Weight.
			lbs.	lbs.	lbs.
15/17	125	50	1 $\frac{3}{4}$	$\frac{1}{2}$	2 $\frac{1}{4}$
16/17	250	250	3 $\frac{1}{4}$	2	5 $\frac{1}{4}$
18/17	250	250	3 $\frac{1}{2}$	2	5 $\frac{1}{2}$
19/17	200	200	3	1 $\frac{1}{2}$	4 $\frac{1}{2}$
23/17	350	300	5 $\frac{1}{2}$	3 $\frac{1}{4}$	7 $\frac{3}{4}$
24/17	125	150	1 $\frac{3}{4}$	1	2 $\frac{3}{4}$
25/17	150	200	2 $\frac{1}{4}$	1 $\frac{1}{4}$	3 $\frac{3}{4}$
26/17	150	250	2 $\frac{1}{2}$	1 $\frac{3}{4}$	4 $\frac{1}{2}$
27/17	125	175	1 $\frac{1}{2}$	1 $\frac{1}{4}$	2 $\frac{3}{4}$
28/17	125	125	2	1	3
29/17	125	125	2	1	3
30/17	125	125	2	1	3

Samples of these cigars were forwarded to the Controller of Labour, Kuala Lumpur, who in turn submitted them to the contractor who supplies the emigrant coolies at the Port Swettenham Camp, with cigars. The contractor asked to be furnished with the following particulars:

- (1) If the authorities at Kuala Tembeling would be able to quote us a c.i.f. Klang price per 1,000.
- (2) If they would definitely give us the quantity to the extent of which they could maintain the supply per month.

The Controller of Labour in forwarding the contractor's letter makes the following comments:

"I am told that these cigars are of better quality than the ordinary cooly cigar and might find a market among the more respectable classes of Tamils."

The cigars sold locally to Tamils realized an average price of \$1.50 per 100 for the large size, and \$1 per 100 for the small size. The balance of tobacco leaf was disposed of at an average price of 75 cents per pound. Samples of the leaf were submitted to several native cigar merchants and from the remarks passed by them, it is evident that with certain improvements in the method of curing, tobacco leaf of suitable varieties as grown at Kuala Tembeling would find a ready sale, for native consumption in this country.

SEED SELECTION.

The selection of seed is an important point for consideration in tobacco growing, if the quality of the type is to be maintained.

Both at Kuala Tembeling and at Juasseh plants of the finest growth of each variety were selected for the production of seed. Such plants are not "topped," but allowed to grow normally, all lateral and basal shoots however, being removed. Prior to the appearance of flowers, the head of the plant is "bagged" to prevent cross-fertilisation; and so ensuring that the seed will come true to type. The capsules are allowed to remain on the plants until perfectly ripe, when they are plucked and stored in a cool dry place.

DISTRIBUTION OF SEED TO MALAYS.

Any work having for its object the introduction of new crops of native importance, must at the same time consider the means of systematizing the distribution both of seed and also of information regarding the methods of culture of the crop. With a crop of the nature of tobacco, where care in cultivation makes the difference between profit and loss, the need for instruction becomes doubly necessary.

The native methods of growing tobacco are crude in the extreme, and it is, therefore, a matter of no surprise to find that the varieties of tobacco grown by them are poor in quality. Tobacco stock soon deteriorates through lack of cultivation; so the varieties of tobacco here introduced must be kept up to their high standard if the industry is to flourish in this country.

The question of education in regard to this crop was one of the chief reasons for a small demonstration to Malays of the systems employed in the cultivation and curing of tobacco, which took place at Kuala Pilah in the latter part of November, 1917. Kuala Pilah was chosen for this purpose as being more central than Kuala Tembeling, and because the tobacco grown at the former place gave a truer idea of the conditions under which the natives would grow the crop. The objects of the proposed meeting were circularized to the District Officers of Negri Sembilan and three districts of Pahang and their co-operation was readily given. Representatives of the districts were as follows: Negri Sembilan: Kuala Pilah, 12; Seremban, 12; Tampin, 4; Jelebu, 4; Port Dickson, 2; Rembau, 3. Pahang: Kuala Lipis, 2; Temerloh, 5; Pekan, 4; a total of 48 officers.

The Malays were taken over to Juasseh and shown the tobacco growing at that place. The characteristics of the different varieties were pointed out, and the growth compared. One of the writers gave an account of the methods of cultivation of the crop, the harvesting and the curing process. Finally, they were informed that seed would be supplied free on application. Packets of seed have since been prepared at Kuala Pilah, suitable for distribution. Sufficient seed has been placed in envelopes for cultivation by one cultivator. Since the demonstration there has been a steady demand for seed for all districts represented. At the time of writing 460 packets of seed has been supplied. In many cases the Malay officer has stipulated the varieties required, and these wishes have been respected in all cases. Eight Kuala Pilah Malays decided to try the cultivation on a somewhat larger scale, and took seed sufficient to plant up a total of eight acres of land newly planted with rubber.

POSSIBILITIES OF TOBACCO GROWING IN THE F.M.S.

The progress thus far made in the introduction of tobacco seed into this country does not indicate in any way that the crop is suitable as a main crop for European planters, nor in fact that it would be suitable for such planters to grow even on a small scale. Subsequent experiments may prove this point, but in the absence of data as to possible yields, one is unable to make any recommendations. It is possible that areas of land do here exist suitable for the cultivation of the crop on a large scale, but such land has yet to be defined.

The trials on tobacco growing here described, point to the fact that by natives, tobacco may be grown, of better quality than the varieties at the present time cultivated by them, and undoubtedly yielding a greater quantity of leaf. Presuming that the crops already grown by Malays pays for the work, the cultivation with good varieties of seed should further stimulate the industry among this class of cultivator. Apart from the initial preparation of the land, there is little in the growing of tobacco that calls for hard work, but much that requires constant and close attention. Much of this work should be possible by Malay women. At the present time there appears to be but little demand for women labour, and work on tobacco would certainly compare very favourably with the work that women of this country undertake in the cultivation of padi.

Malays who have asked for seed appear to have no anxiety regarding the disposal of the crop, and it is unlikely that they will experience any difficulty in this matter.

The experiments on tobacco have now been discontinued, but the stock of seed is being maintained at Kuala Tembeling. It is felt that it were better to pause, in order to observe the extent of the success obtained by natives with this seed before going further into the question. A representative distribution of seed has been made, and it is hoped that a review of the crops obtained may be possible in the near future, and further work based on the observations made upon the native crops.

BURIED COCONUT TRUNKS AND ROOT DISEASES OF RUBBER.

By F. W. SOUTH.

NUMEROUS enquiries have from time to time been received at the Agricultural Department, regarding the possible danger of burying felled coconut trunks between rows of rubber trees, more especially on estates where coconuts have been interplanted with rubber and have subsequently been cut out. A particular instance of this recorded last year shows that burying coconut trunks between rows of rubber trees is a dangerous practice and should not be adopted when any considerable number of trees have to be disposed of. The alternative course of splitting up the trunks drying and burning them must be followed, even though it is more expensive. The trunks cannot be left lying about as they harbour beetles and for this reason are required by law to be destroyed. Moreover if left lying they might also harbour injurious fungi.

The particular instance referred to occurred on a large estate of which a part had originally been planted with coconuts. At a later date it was interplanted with rubber and between three and four years ago the coconuts were cut out and their trunks were cut into lengths and buried in holes in the middle of the spaces between the rows of rubber trees. During last year it was noticed that a considerable number of the rubber trees were dying or sickly. When the trees were opened up it was found that they were suffering from root diseases, principally brown root disease, *Hymenochaete noxia*, and wet rot *Poria hypolateritia*, working either together or separately. In nearly every instance it was found that a badly diseased and decayed root of each of the attacked trees ran back into one of the pits in which the coconuts had been buried. In some instances only the roots connecting with the pit had become diseased and the disease had not reached the main root and collar. In such cases the infected roots could be cut off and burnt and the trees could thus be saved. In several other instances, however, the main root and collar were badly affected and the trees had to be taken out and burnt.

After this discovery all the coconut pits were opened up and the decaying trunks were taken out, split up and piled cross-wise to dry before being burnt. At the same time rubber roots in the pits were followed up and when diseased were removed and burnt. It was remarkable how little the harder fibrous portions of the coconuts had decayed; indications of the presence of *Poria hypolateritia* could be found in most of them.

Heaps of dug out coconut wood that had been drying for a few weeks also showed very numerous fructifications of the fungus *Fomes lucidus*, a common saprophyte in the tropics that has occasionally been recorded as killing living trees which it attacks at the roots and collar. It was evident that two of these fungi that were rotting the coconut trunks were *Hymenochaete noxia* and *Poria hypolateritia* and that these trunks were full of these fungi in an actively growing condition just about the time that the roots of the rubber trees had grown long enough to penetrate well into the mass of decaying material. It should be remembered that such decaying material retains moisture and that tree roots are definitely attracted by moisture.

NIPAH VERSUS BERTAM ATTAPS.

BY B. H. F. BARNARD,

Deputy Conservator of Forests, Perak.

ENQUIRIES have been made as to the comparative values of *nipah*, *Nipa fruticans*, and *bertam*, *Eugeisona tristis*, as materials for roofing temporary and semi-permanent buildings. Opinions obtained from all parts of the Federated Malay States varied very considerably. This is no doubt due largely to the difference in cost in various localities and still more to the difference in the qualities of *nipah* attaps. It is obviously impossible to make any useful comparison between the two materials either in remote inland districts where *bertam* is easily obtained and *nipah* is expensive, or in Coast districts where the reverse is the case. *Bertam* attaps are fairly uniform as regards quality. The same cannot be said of *nipah*. There is little doubt that the best *nipah* attaps are superior to *bertam* in every way, but the ordinary *nipah* attap as supplied by building contractors is a very inferior article. Good attaps can no doubt be obtained by a special order, but they are not easily bought in the chief commercial centres. The ordinary attap of commerce has deteriorated much in quality in recent years, in Perak at any rate. Formerly a *nipah* attap roof having a pitch of 40 or 45 degrees, with the attaps laid two inches apart was considered to be good for four or five years. The modern *nipah* attap under the same conditions will not last more than three years, and will probably leak at the end of two years. The inferiority is due largely to the use of immature leaves, contributory causes being a lessening in the overlap of the leaves and insufficient drying. The increased use of bamboo, or other inferior materials for the "backbone" (*mengkawan*) renders the attap more liable to damage in handling. The best material for this purpose is split *nibong*, which being rigid permits of the attap being handled without bending and consequent disarrangement of the leaves. The cause of this deterioration in quality may perhaps be found in the more general use of tiles, corrugated iron, and patent roofing materials, which has discouraged the regular manufacture of the better article. Whatever the cause may be, the result is that a roof made of ordinary *nipah* attaps such as are supplied by petty contractors, laid five or six to the foot, with a pitch of 45 degrees will not last more than three years and will require repairs towards the end of the second year. A *bertam* attap roof pitched at 50 degrees, with the leaves closely laid will last for four or five years; repairs may be required during the fourth year. Comparisons of the number of attaps used in each case is of no practical use, owing to the varying sizes of the manufactured *nipah* attaps on the one hand, and of the *nipah* leaves on the other. We are dealing with general averages in both cases. It is equally useless to go into minute details of costs of materials as these obviously vary in different districts according as *nipah* or *bertam* is more easily obtained. The *bertam* roof to be satisfactory requires a steeper pitch: the total area of roofing is therefore larger than in the case of a *nipah* roof. As regards the cost of fixing, *bertam* is rather more expensive in Perak, whereas in

the other States it is said to be slightly cheaper. In both cases the cost is considered per square (10 ft. $\times$ 10 ft.) and not per hundred attaps. The figures given for fixing vary from \$3 to \$4.50 per square, but the actual cost of either depends upon the general rates of labour obtaining in the locality. The object of this note is to call attention to the possibilities of the more extended use of *bertam* attaps in districts where *bertam* can be obtained. When placing a contract for a temporary building the natural tendency is to specify *nipah* attaps, without considering whether *bertam*, even at a slightly higher cost, would not be preferable to the usual quality of *nipah* attap which contractors use.

Bertam may be cut on State land by anyone free of charge and without licence. Permission to cut it free of charge in the Forest Reserves can also usually be obtained on application to the District Forest Officer.

**RULES UNDER THE AGRICULTURAL PESTS
ENACTMENT No. 13, 1913.**

(From the *Federated Malay States Government Gazette*, Vol. IX,
No. 21 of 14th September, 1917.)

No. 2723.—WHEREAS by section 21 (i) of "The Agricultural Pests Enactment, 1913," it is enacted that the Chief Secretary may make rules for preventing the introduction of pests into the Federated Malay States and that such rules may provide, amongst other things, for prohibiting the landing in the Federated Malay States from places outside the said States of any plant the landing of which may appear to the Chief Secretary to be likely to introduce any pest:

AND WHEREAS it appears to the Chief Secretary that the importation of any plant of Para rubber from America is likely to introduce into the Federated Malay States the fungus known variously as *Fusicladium Macrosporum* or *Passalora heveæ* which is injurious to cultivated plants;

NOW, THEREFORE, in exercise of the powers aforesaid the Chief Secretary makes the following rule:

No person shall, except with the written permission of the Director of Agriculture, Federated Malay States, in that behalf and subject to the terms and conditions (if any) thereby imposed, land or cause to be landed in the Federated Malay States from any place outside the said States any plant of Para rubber (*Hevea brasiliensis*) exported from America.

In this rule the word "plant" has the meaning assigned thereto in "The Agricultural Pests Enactment, 1913."

(From the *Federated Malay States Government Gazette*, Vol. IX,
No. 25 of 9th November, 1917.)

No. 3274.—In exercise of the powers vested in him by section 21 (ii) of "The Agricultural Pests Enactment, 1913," the Chief Secretary to Government makes the following rule:

Every owner and occupier of land whereon any plant shall be found to be attacked by or affected with any pest specified in the schedule hereto shall, within the period prescribed in the said schedule, give notice thereof in writing or otherwise to any one of the following officers:

The Chief Agricultural Inspector, Federated Malay States,
Kuala Lumpur;

The Assistant Agricultural Inspector, Perak, Taiping;

The Assistant Agricultural Inspector, Selangor, K. Lumpur;

The Assistant Agricultural Inspector, N. Sembilan and Pahang,
Seremban;

provided that no owner or occupier shall be bound to notify under this rule the finding on his land of any pest the finding whereof thereon shall have been duly notified under this rule by any other owner or occupier of such land.

In this rule words defined in "The Agricultural Pests Enactment, 1913," have the meanings thereby assigned to them.

SCHEDULE.

Name of pest.	Period within which notice to be given.
Pests of Para rubber :	
1. <i>Phytophthora</i> sp. Black-stripe Canker. A disease of the renewing bark.	} Within fourteen days of first finding pest.
2. <i>Sphaeronema</i> sp. "Mouldy Rot." A disease of the renewing bark.	

**MINUTES OF MEETING OF THE PLANTERS'
ASSOCIATION OF MALAYA,**

held at the Chamber of Commerce, Penang,
on 26th February, 1918, at 10.30 a.m.

PRESENT :

Mr. Wm. Duncan (*in the Chair*)

„ H. C. E. Zacharias (*Secretary*)

and the following DELEGATES :

From Batang Padang D.P.A.	...	Mr. J. H. Allard
„ Batu Tiga D.P.A.	...	Messrs. T. J. Cumming and G. H. Bennett
„ Central Perak P.A.	...	Messrs. A. B. Milne, S. Somerville and J. S. Ferguson
„ Johore P.A.		„ J. H. Monson, W. Miller-Mackay, J. S. Beldam and C. Bradbery
„ Kajang D.P.A.		„ E. N. T. Cummins and O. P. Dakeyne
„ Kapar „		Mr. L. Mooijaart
„ Klang „		Messrs. C. A. Buxton and E. B. Prior
„ Kuala Langat D.P.A.	...	„ H. O. Kennedy and F. H. Mustard
„ Kuala Lumpur „		„ F. Clyde Jeavons, D. S. Gardner and Lt.-Col. A. J. Fox
„ Kuala Selangor D.P.A.	...	„ Thos. H. Menzies, H. C. Mustard, Thos. More, R. S. McCulloch and H. B. Dudley
„ Lower Perak P.A.		„ W. Dell, R. H. Phillips and R. M. Latham
„ Malay Pen. Agl. Assn.		„ P. Mitford, A. R. Morgan, Geo. Stothard, M. Strivens, J. W. Kennedy, E. D. Lane, T. Wilson and J. Cruickshank
„ Negri Sembilan P.A.	...	„ C. Ritchie, J. Bruce and J. D. McCulloch
„ Taiping P.A.		Dr. W. J. Dixon, T. Gordon Croal and Mr. W. H. Tate
„ Ulu Selangor D.P.A.	...	Messrs. M. D. Fallon and G. C. Bailey

VISITORS—Mr. E. W. F. Gilman (Acting Controller of Labour), the Rt. Rev. the Lord Bishop of Singapore, Messrs. A. M. Tuke, Jas. McLean, R. J. Creighton, Chas. Wilkins, F. M. Riley, Norman Davie, A. W. Davidson, W. H. Watson, R. P. Phillips, R. S. Chantler, W. Rankin, H. W. Rieckard, F. C. Ebbels, E. L. D. Evans, E. D. Money, S. W. Yaxley and Drs. Waugh Scott and M. J. Rattray.

In the absence of the Hon'ble Mr. R. C. M. Kindersley, Mr. W. Duncan is, on the proposal of Mr. Ritchie seconded by Col. Fox, unanimously voted to the chair.

Mr. DUNCAN thanks the members for voting him to the Chairman for the meeting, and says he was very pleased to see so many delegates and visitors present. He hoped the discussions which would ensue would be of considerable benefit. The agenda was not a very lengthy one, but as there were one or two items which would entail considerable discussion he asks those delegates who had remarks to make to put them in as short a form as possible in the circumstances, and that on those subjects upon which no definite decisions could be arrived at at the meeting the discussion be not prolonged.

1. The minutes of the meeting held on the 19th December, 1917, are taken as read, confirmed and signed.

2.—WAR RELIEF.

The SECRETARY reports the receipt to date of the following amounts :

(a) Collected indirectly through Constituent Associations—

Batang Padang	...	...	...	\$	505.00
Batu Tiga	...	...	...		1,961.00
Central Pahang	...	...	...		485.00
Central Perak	...	...	...		1,920.00
Kajang	...	...	...		1,154.00
Kapar	...	...	...		615.47
Klang	...	...	...		2,680.00
Krian	...	...	...		1,191.46
Kuala Langat	...	...	...		670.00
Kuala Lumpur	...	...	...		2,023.18
Kuala Selangor	...	...	...		380.50
Lower Perak	...	...	...		3,058.56
Negri Sembilan	...	...	...		3,650.00
Taiping	...	...	...		2,619.21
Ulu Selangor	...	...	...		1,746.02

Total ... \$ 24,659.40

Johore ... 3,125.00

Kedah ... 343.00

Penang and Province Wellesley ... 136.07

Total ... \$ 28,263.47

(b) Collected directly from individuals through their Bankers—

	\$	c.		\$	c.
BATANG PADANG.			<i>Brought forward</i> ... 1,666.06		
Davidson, R. ...	30.00		KAJANG—(cont.)		
BATU TIGA.			Quinton, L. M. ...	10.00	
Arter, J. S. ...	35.00		Schwabe, E. M. ...	40.00	
Begg, N. C. ...	15.00		Solbe, H. E. G. ...	50.00	
Bell, C. ...	75.00		Sparshott, C. ...	20.00	
Bennett, G. H. ...	75.00		Tyler, E. W. ...	60.00	
Bragg, W. H. ...	60.00		Wiggins, T. G. ...	30.00	
Crush, C. N. ...	30.00		KAPAR.		
Cumming, T. J. ...	75.00		Case, W. R. ...	45.00	
Davidson, D. C. K. ...	40.00		Fisher, N. ...	90.00	
Robertson, J. A. ...	30.00		Leslie, P. W. ...	10.00	
Sansom, P. N. ...	45.00		O'Brien, W. L. R. ...	75.00	
Scott, J. M. ...	26.66		Okeden, W. P. ...	30.00	
Spooner, A. F. ...	60.00		Pratt, J. C. ...	18.00	
Tucker, W. S. Reeve ...	10.00		Stonehewer, E. S. ...	51.00	
Webb, C. M. ...	15.00		Tedlie, T. H. ...	30.00	
Will, R. W. ...	24.00		KELANTAN P.A.		
CENTRAL PAHANG.			Taylor, A. N. ...	30.00	
Birkemose, F. ...	60.00		KLANG.		
McVitie, D. D. ...	45.00		Buxton, C. A. ...	45.00	
Sungei Bilut Estate ...	20.00		Greenhill, R. D. ...	50.00	
Williams, P. J. A. ...	72.90		Gulland, D. L. ...	20.00	
Willis, E. J. ...	44.75		Maguire, C. ...	30.00	
CENTRAL PERAK.			McNeill, F. ...	30.00	
Jonklaas, W. O. ...	60.00		Prior, E. B. ...	45.00	
Lancaster, H. de Z. ...	50.00		Roberts, C. L. ...	10.00	
Robbins, N. ...	15.00		Smith, C. Hammond ...	75.00	
Wilson, T. K. ...	45.00		Trollope, F. A. ...	45.00	
JOHORE P. A.			Wakefield, E. C. ...	40.00	
Adamson, H. ...	39.50		KUALA LANGAT.		
Bell, C. E. ...	20.00		Irvine, H. C. dArcy ...	30.00	
Bolton, G. V. ...	84.00		Lendrum, J. B. ...	45.00	
Fowler, A. B. ...	40.00		Mann, J. P. ...	30.00	
Jessen, G. ...	24.00		Munro, R. W. ...	40.00	
Ross, D. A. ...	79.75		KUALA LUMPUR.		
KAJANG.			Armstrong, H. ...	75.00	
Beatty, C. ...	20.00		Barnet, G. P. ...	75.00	
Clerk, G. P. ...	40.00		Barwise, D. R. ...	54.00	
Dakeyne, O. P. ...	75.00		Campbell, F. M. ...	75.00	
Fowler, H. O. ...	8.50		Coppens, P. ...	30.00	
Kinder, C. ...	30.00		Douglas, J. B. ...	49.95	
Kindersley, Hon'ble			Farrell, M. ...	30.00	
R. C. M. ...	75.00		Fraser, W. D. ...	60.00	
Mactaggart, R. K. ...	7.00		Harvey, F. G. ...	60.00	
Messney, R. F. ...	15.00		Harvey, T. R. ...	30.00	
Miller, C. H. ...	10.00		Jeavons, F. C. ...	75.00	
Moullin, H. R. ...	25.00		Laddell, R. G. ...	60.00	
Paul, C. ...	15.00		MacCallum, R. A. ...	33.00	
<i>Carried forward</i> ...	1,666.06		<i>Carried forward</i> ...	3,497.01	

	\$	c.
<i>Brought forward</i> ...	3,497.01	
<i>K. LUMPUR—(cont.)</i>		
McCrow, D. W. ...	30.00	
Smith, M. Sharpe ...	77.13	
Wilkinson, H. B. ...	60.00	
Zacharias, H. C. E. ...	45.00	
<i>KUALA SELANGOR.</i>		
Brown, T. L. ...	30.00	
Estrange, G. R. 'L. ...	60.00	
Fesq, W. ...	25.00	
Gordon, W. M. ...	51.00	
Irving, L. A. ...	90.00	
Mercer, R. W. G. ...	30.00	
More, Thomas ...	75.00	
Stevens, T. L. ...	40.00	
<i>LOWER PERAK.</i>		
Bayley, H. ...	45.00	
Bayley, R. G. ...	84.00	
Brodie, T. ...	20.00	
Cruickshank, E. J. ...	15.00	
Dodgson, R. H. ...	30.00	
Dukes, M. B. ...	30.00	
Evans, R. C. ...	30.00	
Park, H. H. ...	39.00	
Symes, A. B. ...	30.00	
Tobutt, K. ...	30.00	
<i>M. P. A. A.</i>		
Baber, E. ...	45.00	
Carless, H. G. ...	36.00	
Darke, A. E. G. ...	60.00	
Hargreaves, J. ...	30.00	
Josselyn, E. W. ...	60.00	
Mackay, C. H. ...	54.00	
Mallet, H. W. ...	30.00	
Perera, C. ...	10.00	
Rasmussen, G. ...	30.00	
Rickeard, H. W. ...	60.00	
<i>NEGRI SEMBILAN.</i>		
Adair, H. ...	45.00	
Adams, T. Slade ...	60.00	
Buyers, W. ...	60.00	
<i>Carried forward</i> ...	5,043.14	

	\$	c.
<i>Brought forward</i> ...	5,043.14	
<i>N. SEMBILAN—(cont.)</i>		
Clarkson, S. W. ...	30.00	
Crawford, W. P. ...	45.00	
Cuthbertson, T. F. ...	60.00	
Fenton, R. D. ...	40.00	
Grant, G. ...	60.00	
Handover, W. P. ...	30.00	
Hanmer, H. R. ...	42.00	
Hearn, A. J. ...	30.00	
Heherr, F. J. ...	45.00	
Hickson, C. L. O'Hara ...	40.00	
King, E. T. ...	10.00	
King, H. W. F. ...	35.00	
Mansfield, L. ...	42.00	
Maycock, R. M. A. ...	30.00	
Mills, E. G. ...	100.00	
Mills, G. R. ...	36.00	
Paterson, A. F. ...	45.00	
Ritchie, C. ...	45.00	
Reynolds, K. P. ...	60.00	
Smith, E. E. ...	40.00	
Swinton, C. H. ...	20.00	
Taylor, V. A. ...	150.00	
Watt, W. ...	30.00	
<i>TAIPING.</i>		
Bruas Estate ...	22.00	
Croal, T. Gordon ...	60.00	
Grant, G. A. ...	60.00	
Moraes, H. F. ...	30.00	
Palmer, S. B. ...	44.00	
Ritchie, C. ...	45.00	
Ryves, V. ...	30.00	
Willis, A. ...	30.00	
<i>ULU SELANGOR.</i>		
Brunton, Roger ...	20.00	
Coe, D. F. ...	10.00	
Dakeyne, N. H. ...	30.00	
Fallon, M. D. ...	20.00	
Hastings, P. E. ...	30.00	
Kennedy, W. O. ...	20.50	
E. D. M. K. K. ...	80.00	
<i>Total</i> ...	6,639.64	

The SECRETARY further reads the following letters :

“KUALA LUMPUR,
“29th December, 1917.

“DEAR SIR,

“At the last meeting of this Association a resolution was passed instructing me to ask whether you would be good enough to let me have a list of all men gone from here to the war whose case has been investigated by you.

"I have a fairly complete card index in this office of these men and I have been instructed to enter the information when obtained from you, in this register, so as to enable any local enquirer to satisfy himself that a certain case has already been enquired into.

"Thanking you in anticipation,

"Believe me, etc.,

"(Sd.) H. C. E. ZACHARIAS,

"*Secretary.*

"SIR WILLIAM TAYLOR, K.C.M.G.,

"MALAY STATES INFORMATION AGENCY,

"88, CANNON STREET,

"LONDON, E.C. 4."

"88, CANNON STREET,

"LONDON, E.C. 4,

"4th December, 1917.

"DEAR SIR,

"I thank you for your letter of the 24th October last, informing me that your Association had been so good as to pass at a recent meeting a vote of thanks to me for my services in connection with the War Relief Fund.

"Anything that I can do for the Fund is a source of pleasure to me, but I much appreciate having earned the approval in the matter of your Association.

"I am also much indebted to the members of the Executive Committee, with which I have the privilege of working at this end, whose business qualifications and interest in the working of the Fund render my task an easy one.

"I am, etc.,

"(Sd.) W. T. TAYLOR.

"H. C. E. ZACHARIAS, ESQ.,

"SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

Mr. DUNCAN points out that, as they were aware, they had at present for some months been obtaining collections directly and indirectly. He thinks it would be well if in future only the direct method was adopted, by all individuals giving Bankers' Orders. There was every evidence that the money was well applied and that there need be no fear that it was being left idle. The Malay Peninsula Agricultural Association in the list before them did not show up very well and he appealed to everybody and to them particularly to keep up their contributions.

Mr. LANE explains that he was contributing already to a Kedah fund and that this would probably apply to a good proportion of members of the Malay Peninsula Agricultural Association whose estates were in Kedah.

Mr. TATE considers it better to keep going both methods as money might be lost if one was stopped—e.g., small contributions from those who had no Bankers.

3.—EXPORT DUTY.

The SECRETARY reports that he had received the following resolution from the Central Perak Planters' Association on this subject and he regrets that this item had inadvertently been left out of the agenda :

“That efforts be made through the Planters' Association of Malaya to compel Government to adopt a more genuine basis for calculating export duty on rubber. Members of this Association desire that Singapore prices instead of London prices should form the basis, and also feel that the basis should be graded into three distinct grades of rubber for the purposes of assessing duty.”

As they would remember, the subject had been referred by the last meeting to the Standing Committee who at their meeting on 28th January recommended “that the export duty on rubber be based on the highest Singapore price instead of the highest London price and that if more revenue was wanted the war tax be increased.” He had also been instructed to attend the meeting of the Selangor Chamber of Commerce on the 30th of January to put the Planters' Association of Malaya views before them in order that, if possible, joint action might be taken. He understands that the Chamber had asked the Hon'ble Mr. A. K. E. Hampshire to see the Chief Secretary privately in order to ascertain his views on the subject. In the meantime Mr Kindersley had gone on leave and as far as the Standing Committee was concerned no further action had therefore been taken.

Mr. DUNCAN feels confident that the unanimous view was that Government should adopt a genuine basis. At present they were paying on 5*d.* more than the actual price of the day—*i.e.*, on nearly 30 per cent. more than they ought to pay. Needless to say, this would hit the small producer even harder than large concerns. He regretted Mr. Kindersley's absence but thinks that immediate action should be taken to adjust the duty on an equitable basis.

Mr. KENNEDY concurs that definite action was required on their part. The duty had been fully discussed by all Constituent Associations and everybody seemed to agree as to the basis on which this duty should be computed. There was a tendency of confusing the export duty on rubber with the war tax and it seemed essential that the two points should be kept entirely distinct. All agreed that the present basis was inequitable and that the Singapore price should be adopted. If necessary the war contributions could be maintained by increasing the war duty or else by continuing to assess war tax on the present basis.

Mr. McCULLOCH supports the last speaker and thinks that the case should be made out on the question of export duty pure and simple quite apart from any question of war contribution. All they should to-day urge was to place the export duty on an equitable basis.

Mr. RITCHIE warns the Association against giving Government an absolutely free hand in making up any deficiency in the war tax. They should remember that the war contributions of the Federated Malay States did not consist only of this rubber super tax, but whilst this tax was ear-marked for war purposes the general

revenue of the country was pledged for the purpose of making their war contribution. If there was any decrease in war funds why should the whole of that deficiency be made up by the rubber industry.

Mr. TATE recommends the grading of rubber for export tax purposes.

Mr. DUNCAN believes that the majority of planters were against all such complications of a very controversial nature.

Mr. KENNEDY moves "that this Association is strongly of opinion that Singapore prices ought to be adopted as a basis for computing the ordinary export duty on rubber and it requests Government to take the necessary steps to make this basis operative."

Mr. FERGUSON seconds the proposal, which is carried unanimously.

4.—LABOUR.

(a).—MIDWIVES.

The SECRETARY reports having circularized all Constituent Associations on the subject under date January 1st, 1918.

The Johore Planters' Association had informed him that there were in Johore two qualified European midwives and five native women who had obtained certificates after two years' training; that seven native women were under training, of whom, two were ready for examination. Now that the subject had been brought to the front, many estates were taking steps to arrange for the training of further candidates. A large modernly equipped maternity ward had been opened at Johore Bahru last year.

The members of the Batang Padang Association had not yet obtained any midwives but the matter had been brought to their notice.

The Kapar District Planters' Association reported that a trained midwife was already employed in one Group Hospital whilst the other Group Hospital in the district was endeavouring to obtain a qualified person.

The SECRETARY also reads the following correspondence :

"KUALA LUMPUR,

"29th December, 1917.

"SIR,

"MIDWIVES.

"I have the honour to acknowledge the receipt of your letter 447 of the 1st instant.

"I am circulating all members and am asking them to give this matter their serious attention.

"At the same time I am instructed to enquire from you how long the local institutions mentioned by you take to train midwives.

"I have, etc.,

"(Sd.) H. C. E. ZACHARIAS,
"Secretary.

"CONTROLLER OF LABOUR,
"FEDERATED MALAY STATES,
"KUALA LUMPUR."

"KUALA LUMPUR,
"5th January, 1918.

"No. 447/17.

"SIR,

"I have the honour to acknowledge the receipt of your letter dated 29th December, 1917.

"2. In reply to the question contained in your letter under reply, I have the honour to inform you that the Principal Medical Officer states that the period required to train midwives in the local institutions is one year.

"I have, etc.,

"(Sd.) J. R. O. ALDWORTH,
"Controller of Labour, F.M.S.

"THE SECRETARY,
"PLANTERS' ASSOCIATION OF MALAYA,
"KUALA LUMPUR."

Col. Fox reports that the Kuala Lumpur District Planters' Association were trying to engage one or more midwives.

Mr. RITCHIE hopes that Government were more expeditious in dealing generally with applicants than they had been in his own case. He had obtained a suitable candidate to undergo training and had offered to pay for such training, but although he had written to Government six weeks ago he had not yet received a reply. The arrangement with the woman was that after training he would pay her her board and \$15 per mensem.

Mr. JEAUVONS thinks it was evident that serious endeavours were being made to employ midwives more generally and that the Government should be informed accordingly.

Mr. BUXTON seconds the proposal and would like to hear what supply could be obtained from India.

Mr. JEAUVON'S proposal is passed.

The BISHOP OF SINGAPORE invited by the Chairman, informs the meeting that the Medical Mission at Malacca had already trained one midwife for Dr. Watson and had sent her there ten days ago. The question of discipline made it impossible for them to take others but the Mission would be very pleased to take any suitable Christian woman and train them gladly for work as midwives on estates. (Applause.)

Mr. GILMAN says that midwives could undoubtedly be obtained from India although the exact number he was not in a position to give but he would be very glad to help any estates who required them and invited them to write to him. It went without saying that his department could not import midwives on the chance of some estates requiring their services but that if the estates gave definite instructions for the engagement of such a person he had no doubt his department would be able to procure them.

Mr. FALLON enquires what pay these women should receive.

Mr. BENNETT enquires whether one was to be employed by each estate or only by each Group Hospital.

Dr. WATSON, invited by the Chairman, says that the number required depended on the locality and that whilst some estates no doubt could find sufficient employment for a midwife, many others could not. As regards their pay, the one who had just come to him from the Malacca Medical Mission received \$30 per mensem and an allowance for a servant. She was not confining herself only to midwifery but was attending women before their confinement, etc.

Mr. CUMMINS thinks that a number of new points had been brought out and he, therefore, proposes that Constituent Associations be circularized giving the information they had heard to-day.

Mr. BENNETT seconds the proposal, which is carried unanimously.

Mr. MILNE enquires what the Government requirements were.

Mr. GILMAN replies that all he could say was that the Government of Madras was pressing for the employment of midwives on estates, but that further exact details of the requirements he was not in a position to give at the moment.

(b).—RECRUITING.

The SECRETARY reads the following letters received from the Controller of Labour:

“KUALA LUMPUR, F.M.S.,

“24th December, 1917.

“No. 468/17.

“SIR,

“In reply to your letter of 24th October, 1917, in which you refer to complaints regarding the prevalence of bribery in India, I have the honour to inform you that the matter is one which is constantly receiving attention from the officers of this department stationed in India.

“2. The arrangements at the dépôts are such that there is no excuse for any labourer to offer bribes to the employees of the department. All cases of official rejections are dealt with personally by the European in charge, without exception.

“3. The complaints that are made at the dépôts regarding extortions usually concern subordinates of the Railways and Police in India. Any complaints of this nature, which appear to be genuine, whether concerning subordinates of this department or others, are enquired into. Unfortunately, it is usually found that

the complaints are so inaccurate as to baffle enquiry. Genuine complaints will always receive thorough enquiry, but it is obvious that vague allegations unsupported by definite facts can lead to nothing.

"4. Dr. Ford, the Superintendent of the Emigration Dépôt, at Negapatam, in discussing this subject, points out that kanganies who are unsuccessful in their recruiting are very likely to invent stories of corruption to explain their lack of success, and he expresses his regret that so few of the many managers of estates, who visit India, take the opportunity of inspecting the dépôts, and familiarizing themselves with the procedure there. He feels that those acquainted by personal observation with the arrangements in India would be in a better position to form a proper judgment upon the value of complaints of this nature.

"5. While, therefore, definite complaints will always receive attention, and the planting community can rest assured of the energetic co-operation of the officers of this department in repressing malpractices that may be brought to light, I must express regret that your Association should consider that an unsatisfactory state of affairs exists, when no facts have been proved to warrant such a conclusion.

"I have, etc.,

"(Sd.) J. W. CONDALL ELLIS,

"for Controller of Labour, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"KUALA LUMPUR,

"6th February, 1918.

"No. 68/18.

"SIR,

"I have the honour to inform you that at a meeting of the Indian Immigration Committee held on the 4th instant it was decided that a matter to which attention has been called by Dr. Ford, should be brought to your notice.

"2. The matter in question was a case in which an estate had appointed a conductor to supervise recruiting kanganies. The result was that one of the kanganies found himself the victim of the conductor's cupidity. Dr. Ford's comment upon this, which I feel sure will carry weight with your members and discourage them from instituting such undesirable supervision, is: 'This kangany would probably have recruited more labour for this estate if there had been no conductor in India to interfere.'

"I have, etc.,

"(Sd.) E. W. F. GILMAN,

"Acting Controller of Labour, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"KUALA LUMPUR,

"6th February, 1918.

"No. 67/18.

"SIR,

"I have the honour to inform you that at the last meeting of the Indian Immigration Committee the question of recruiting in India by unlicensed recruiters was discussed. Circular letters were placed upon the table which had been addressed to planters in Malaya by such persons offering to recruit labour for estates in this country, or to supervise the work of licensed recruiters while in India. The Committee expressed their very decided disapproval of all such practices and agreed that I should instruct the officers of this department in India to place obstacles in the way of the emigration of coolies so recruited, should it be discovered that an attempt was being made to send them over here as voluntary emigrants. These instructions which are, needless to say, only a confirmation of previous practice will be issued.

"2. The success of measures taken against such persons must, however, to a great extent, depend on the co-operation of employers with the Indian Immigration Committee and the Labour Department in their endeavours to establish and maintain for the Federated Malay States a clean recruiting record. I would, therefore, earnestly request that you would be so good as to impress upon the members of your Association the undesirability of entering into correspondence with such persons and the importance of conducting their business in India without recourse to professional recruiters.

"I have, etc.,

"(Sd.) E. W. F. GILMAN,

"Ag. Controller of Labour, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"KUALA LUMPUR,

"No. 64/18.

"6th February, 1918.

"SIR,

"I have the honour to inform you that the Indian Immigration Committee at a meeting held at Kuala Lumpur on the 4th instant, deprecated the use of a single designation or tin ticket number by more than one estate, and were of the opinion that the matter should be referred to you as one in which your assistance would be of the greatest value.

"I should therefore be greatly obliged if you could convey to your members the views of the Committee on this subject; and I trust that if any of them are recruiting for more than one estate on the same tin ticket number they will apply to the Financial Agents

in India to allot them distinct numbers for each estate for which they are recruiting and will be careful to specify in all licences the actual estate for which the labour is being recruited.

"I have, etc.,

"(Sd.) E. W. F. GILMAN,

"*Ag. Controller of Labour, F.M.S.*

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"KUALA LUMPUR,

"10th January, 1918.

"No. 531/17.

"SIR,

"I have the honour to draw your attention to the fact that there appears to be but little prospect of sufficient shipping being available in 1918 to bring across to the Federated Malay States Indian Labourers in the large numbers which have been carried in recent years; 72,091 arrived with assisted passages in 1916 and 78,407 with assisted passages in 1917. The number last year would have been very much larger had shipping accommodation been procurable.

"2. With regard to the restrictions upon recruiting which it was necessary to impose in 1917 the Emigration Agent, Madras, writes:

'The issue of so great a number of licences this year has resulted in congestion at Avadi, heavy expenses to the Fund in feeding coolies shut out from the steamer, instruction on ten occasions to the Recruiting Inspectors to stop all bookings till further orders, endorsement of kangannies' licences after shipment on ten occasions preventing them from bringing coolies again for a period of from three to five weeks, and great hardship to kangannies who have had to maintain their coolies at recruiting centres until the Inspectors were permitted to purchase tickets for them.'

"3. It appears to the officers of the department in India and to myself desirable to mitigate so far as possible the inconveniences enumerated in the above quotation and I propose to call a special meeting of the Indian Immigration Committee in order to consult them as to what means should be taken to attain that object.

"4. Meantime I am sending to the managers of all estates that are in the habit of recruiting in India a circular requesting them to notify the Deputy Controller of Labour, Penang, not later than the end of this month (a) what number of labourers they propose to recruit in 1918, and (b) what number of kangany licences they propose to apply for during 1918.

"5. I have to ask your Committee to be good enough to afford every assistance in obtaining this information without delay and so to co-operate with the Indian Immigration Committee in their

attempt to find an equitable solution of the problem which confronts them. The lack of the information may perhaps lead to arbitrary and indiscriminate stoppage of recruiting and perhaps unnecessary hardship in certain cases.

"6. I am addressing the Secretaries of all District Planters' Associations in similar terms.

"I have, etc.,

"(Sd.) J. R. O. ALDWORTH,
Controller of Labour, Federated Malay States.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"LABOUR OFFICE,
"Penang, 16th February, 1918.

"C. of L. 96/18.

"SIR,

"My attention has been drawn to a letter which appeared in the *Straits Times* over the signature 'Puthy Ellathathanam' and which has been copied in the other local newspapers on the subject of the proposed reduction in the number of kangany licences which has been recently approved by the Indian Immigration Committee.

"2 In the statement issued to the Press after the meeting of the Committee at which this decision was come to it was not perhaps made sufficiently clear that the number of licences which it was proposed to issue—*viz.*, 6,000, was capable of extension if, later on, circumstances permitted, so to avoid any general misunderstanding in the matter some further explanation seems called for.

"3. You will observe that it was stated that it was proposed to distribute the issue evenly over the ensuing months—*viz.*, from February to June, so that by the end of June presumably the whole 6,000 would have been issued.

"During the same period in 1917 the total number of licences issued was 6,800.

"4. The measure therefore now taken is rather of a precautionary nature and to ensure equitable distribution in the event of any possible shortage of shipping facilities.

"I have, etc.,

"(Sd.) E. W. F. GILMAN,
"Ag. Controller of Labour, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

“LABOUR OFFICE,
“Penang, 25th February, 1918.

“No. C. of L. (Part) 8/18.

“SIR,

“I am directed to inform you that in response to the enquiry of the Madras Government as to the number of labourers required to emigrate to Malaya during the current year that Government has been informed that the minimum requirements for new coolies in Malaya will be met if authorization be given for the emigration of 73,000 adults, male and female.

“This number represents a reduction of 9,000 on the total number of adult labourers whose emigration to Malaya was authorized for the year 1917.

“I am to state that the number 73,000 was fixed by the Hon’ble Chief Secretary, F.M.S., on the advice of the Controller of Labour, Mr. Aldworth.

“I have, etc.,

“(Sd.) E. W. F. GILMAN,

“Ag. Controller of Labour, F.M.S.

“THE SECRETARY,

“PLANTERS’ ASSOCIATION OF MALAYA,

“AT PENANG.”

Mr. DUNCAN regrets having to admit that there were some reprehensible methods of recruiting in India which however were deviations from the generally adopted means. Kangany licences were often asked for on account of the status it gave to holders and not because the person intended to recruit any labour.

Mr. FERGUSON asks what method the restriction of kangany licences was based on and whether estates had to apply every month.

Mr. GILMAN replies that estates could carry forward unused allotments to the next month and explains the somewhat complicated method on which the issue of these licences had been based.

Circulars had just been issued by him explaining the method further and also asking for particulars of any hard cases which would receive the best attention of the Indian Immigration Committee. It was obvious that since immigration had to be curtailed some method had to be found to do so equitably. The Committee had decided on the reduction of kangany licences, and as action had to be taken at once it was impossible to do so on any acreage basis which had been suggested. They had taken the number of licences issued last year and the number of coolies recruited and taken that as a basis. He could assure the meeting that the distribution was not haphazard but that a complicated formula had been evolved and was being applied, he thinks, successfully. The guiding idea was to maintain old established recruiting connections as this was in the best interest of the country at large, but in order to deal with the hard cases of some young estates 300 licences had been set aside specially to meet their cases.

Mr. CUMMINS thinks that as usual the old companies were getting all the advantages, but anyhow he was glad to find that the young companies in this instance had been given an useful concession. The hardship was very real in the case of young estates who had only done weeding so far and therefore not needed any labour but who now came into bearing and wanted labour badly for a tapping force.

Mr. MOOIJAART approves on the whole of the formula on which the distribution of these licences had been based and he only regrets that the figures taken were those of 1917 and not an average of several years.

Mr. MENZIES by no means agrees that the concession to young estates was sufficient. He quotes the case of an estate just coming into bearing and which out of 20 licences applied for now only was given three.

Mr. DUNCAN reminds speakers that after all it had to be borne in mind that the principal duty of the Immigration Committee was to keep estates going that were in being before the war. People who went on opening up during the war obviously did so at their own risk and it seemed to him quite fair to say that for this reason old estates did deserve preferential treatment.

Mr. FERGUSON enquires whether it was not possible to restrict the repatriation of coolies seeing that their immigration was now so much curtailed. He would suggest that instead of coolies having to give one month they be required in future to give three months' notice.

Mr. MILNE feels certain that to carry out Mr. Ferguson's idea would be the most certain method of restricting emigration.

(c).—SUNDRIES.

The SECRETARY reads the following correspondence :

"KUALA LUMPUR,
"28th January, 1918.

"SIR,

"With further reference to your letter of the 12th of November, this matter has now been considered by the Standing Committee who have instructed me to say that although they are quite sympathetic to the suggestion made by you, they do not consider that this is a matter for the planting community to undertake.

"I have, etc.,
"(Sd.) H. C. E. ZACHARIAS,
"Secretary.

"COMMANDER J. MILLS, R.N.,
"PORT SWETTENHAM."

"KUALA LUMPUR,
"10th January, 1918.

"No. 5564/17.

"SIR,

"I am directed to inform you that on the recommendation of the Indian Immigration Committee the Government has under consideration the question of amending section 66 (i) of the Labour

Code (Enactment 6 of 1916) as regards the fee for the registration of the local engagement of Indian labourers, so as to impose a fee of \$1 in respect of each labourer engaged.

"2. The Chief Secretary will be glad to be favoured with the views of your Association on this proposal.

"I have, etc.,

"(Sd.) S. McARTHUR,

"Under Secretary to Government, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"KUALA LUMPUR,

"14th January, 1918.

"SIR,

"I have the honour to acknowledge receipt of your letter 5564/17 of the 10th instant.

"In reply I am to say that this Association would greatly welcome the suggested amendment.

"I have, etc.,

"(Sd.) H. C. E. ZACHARIAS,

"Secretary.

"UNDER SECRETARY,

"FEDERATED MALAY STATES,

"KUALA LUMPUR."

5.—JAVANESE LABOUR.

The SECRETARY reads a letter he had addressed to the Chief Secretary on the 8th February and that in consequence a deputation consisting of Lieut.-Col. Fox and Mr. J. D. McCulloch had been received by the Chief Secretary on the 19th instant.

Mr. McCULLOCH reports the result of the interview.

6.—MEDICAL MATTERS.

The SECRETARY reads the following correspondence with the Government :

"KUALA LUMPUR,

"10th January, 1918.

"No. 4528/16.

"SIR,

"I am directed to refer to my letter 3578 of the 14th August and your reply thereto of the 15th September last on the subject of medical relief for estate labourers belonging to India and to inform you that after further consideration of the proposal put forward by the Government of Madras that this Government should take over control of estate hospitals and dispensaries in the Federated Malay

States it is suggested that to meet their wishes in this matter this Government might adopt a system based on the provisions of Straits Settlements Ordinances 7 of 1911 and 18 of 1913.

"2. It has been suggested that the following might be the policy to be pursued in future :

"(a) No further estate hospitals shall be constructed by estates, but the Government will construct hospitals and their cost will be met by provisions similar to those contained in Straits Settlements Ordinance 18 of 1913;

"(b) When asked to do so and when in the opinion of Government such hospitals may be so taken over, the Government will take over from estates existing hospitals;

"(c) The Government shall have the power to take over existing estate hospitals when after written warning such estates have failed to comply with the provisions of the law;

"(d) For hospitals taken over by Government under proposals (b) and (c) nothing shall be paid by Government but the estates will bear the cost of putting such hospitals into repair and will contribute to their upkeep by payment of an assessment calculated on the lines laid down in Straits Settlements Ordinance 18 of 1913.

"3. The Chief Secretary will be glad to be favoured with the views of the Committee of the Planters' Association of Malaya on these proposals.

"It would hardly be possible for the Government to at once assume control over all the estate hospitals which have been constructed even if that were desirable and this is not intended.

"It is fully recognized that many of these hospitals are admirably conducted and interference on the part of the Government is uncalled for. At the same time there are others which are not so well conducted and do not come up to the standard which is expected at the present day.

"The Government has already been approached by certain planters with a view to ascertaining whether the Government will adopt the system suggested and it is desirable that a decision should be arrived at as early as possible.

"I have, etc.,

"(Sd.) S. McARTHUR,

"Under Secretary to Government, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"KUALA LUMPUR,

"28th January, 1918.

"SIR,

"I have the honour to acknowledge receipt of your letter 4528 of the 10th instant.

"In reply I am instructed to say that the proposals will be considered at the next General Meeting of this Association to be held on the 26th proximo, when my Committee will be glad to send you a considered reply.

"I have, etc.,

"(Sd.) H. C. E. ZACHARIAS,

Secretary.

"UNDER SECRETARY,

"FEDERATED MALAY STATES,

"KUALA LUMPUR."

"KUALA LUMPUR,

"15th February, 1918.

"No. 3931/17.

"SIR,

"I am directed to invite reference to my letter of even number dated the 27th October, 1917, forwarding extracts from a letter which the Chief Secretary has received from the Secretary to Government of Madras on the subject of the employment of qualified medical men on estates in the Federated Malay States, and to request that you will be so good as to favour the Chief Secretary as early as possible with information as to the terms on which planters are prepared to employ sub-assistant surgeons and assistant surgeons of the Madras Presidency.

"I have, etc.,

"(Sd.) W. MACKRAY,

"for Under Secretary to Government, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

He also reports that copies of this letter had been sent by him to all Constituent Associations together with copies of the minutes of the Inaugural Meeting of the Society of Estate Medical Officers. In reply he had received the following resolutions:

FROM BATU TIGA DISTRICT PLANTERS' ASSOCIATION.—"That this Association strongly opposes the scheme suggested by Government of taking over control of estate hospitals. The management should not be taken out of the Managers' hands."

FROM THE KUALA LANGAT DISTRICT PLANTERS' ASSOCIATION.—"That this Association is not in favour of the proposed powers to assume control of estate hospitals being vested in Government."

FROM THE CENTRAL PAHANG PLANTERS' ASSOCIATION.—"That this Association unanimously supports the resolutions relating to Government control of estate hospitals as passed at the meeting of Society Estate Medical Officers on the 15th December, 1917, with a rider to the effect that, when the Government Medical administration of this country is in a position successfully to undertake the

direction and control of estate hospitals, this Association sees no reason why it should not do so, providing that the cost of such direction and control be defrayed by Government, on the lines adopted in India."

FROM THE MALAY PENINSULA AGRICULTURAL ASSOCIATION.—"While this Association considers that the present system of estate hospitals has been productive of highly satisfactory results, it recognizes that there may be a field for improvement in individual cases, but it desires to express the opinion that higher efficiency is not likely to be brought about by premature drastic legislation, and it strongly protests against the proposed change as there appears to be no foundation whatever for the belief that it is necessary, or, that it would in any way be to the advantage of estate Indian labourers.

The Association also strongly supports the recommendation by the Planters' Association of Malaya contained in their memorandum on medical matters that 'a representative Committee be appointed by Government to consider a comprehensive scheme of reorganization of the Medical and Health Departments which would be ready to be put into operation when conditions permit'."

FROM THE NEGRI SEMBILAN PLANTERS' ASSOCIATION.—"That this Association considers that the great and steady improvement in the health of estate labour force in Negri Sembilan since 1913,* as disclosed by the official returns, does not warrant any support being given to the suggested policy of the Government Medical Department taking over any estate hospital. Without implying that this Association is satisfied with existing conditions, due to the war, there is no evidence whatsoever that any advantage would accrue from the suggested change, but, from the results in Ceylon, everything to condemn it."

Further, this Association entirely approves of the recommendation made by the Planters' Association of Malaya that Government appoint a representative Committee to consider a comprehensive scheme for the reorganization of the Medical and Health Departments."

FROM THE KLANG DISTRICT PLANTERS' ASSOCIATION.—"That this Association is unanimously of opinion that the Government's proposal to take over the control of estate hospitals and dispensaries would be most detrimental to the interests and welfare not only of Indian labourers but of proprietors and the country in general."

The respective delegates rise and report that similar resolutions had been passed but so far not forwarded to the Secretary by the following Constituent Associations:

Johore P.A.
Kuala Selangor D.P.A.
Central Perak P.A.
Lower Perak P.A.

Kuala Lumpur D.P.A.
Kajang D.P.A.
Ulu Selangor D.P.A.

		Per mille.	
* 1914	...	63.00	Death-rate, estate Indian labour force, Negri Sembilan.
1915	...	38.25	
1916	...	31.75	
1917	...	30.03	

Mr. DUNCAN says that the question of the control of estate hospitals and medical supervision was one which had occupied the attention of planters and medical men for a considerable time. It appeared that the present proposal emanated from Madras, but it was really immaterial where the idea emanated as all they had to consider to-day was the answer to be given to the Under Secretary's letter just read out by the Secretary, that is to say whether or not they were in favour of the Government taking over estate hospitals. That being so they really only had to refer to the number of resolutions before them from eleven Constituent Associations who all were entirely against the management and control of these hospitals by Government. Considerable time might profitably or otherwise be spent on arguing and commenting on this matter but they had been asked to consider the question and nothing seemed necessary at this stage but to give their considered answer and it was now up to this meeting to put such a reply in the form of a definite resolution.

Mr. BENNETT enquires whether the Government had ever been asked to give its reason for the suggestion made. If there was any specific reason, surely planters ought to know what it is.

Mr. DUNCAN replies that there was no question of asking Government for any reasons, but of giving them a reply to the question they had asked and he would therefore now put to the meeting as to whether this Association is in favour that the Federated Malay States Government should take over control of estate hospitals and dispensaries on the lines of the Colonial Ordinance 7 of 1911 and 18 of 1913.

A vote is then taken and declared to be unanimously against the suggestion of such Government control. (Applause.)

Mr. MOOIJAART says that now that this letter had been dealt with, the meeting would have to consider the proposal put before them in the memorandum on medical matters submitted by the Standing Committee at the last General Meeting. In that memorandum the Standing Committee proposed that the Government be asked to appoint a representative Committee to consider the whole question of the reorganization of the Government Medical and Health Departments and the improvement of the status of the medical officers generally. Whilst the recommendation was satisfactory as far as it went, it seemed to him that it was not very well possible to expect the Government to enquire into the reorganization of one of its own departments especially if as was probable the result of the enquiry would involve a revision of the whole scale of salaries paid in the Government service. A Royal Commission had been appointed in 1912 to enquire into the conditions of the medical service in India and if that was necessary in India with their notoriously higher scale of salaries how much more necessary would it be in this country. It must be quite evident that this Government was incapable of making any change in its own medical department and if a Commission of investigation was appointed it would be necessary for it to go into the conditions of the whole of the public service. It therefore was necessary for them to refer the matter to the Colonial Office direct and he would propose that this question be referred back to the Standing Committee with the view of a statement being prepared which should be communicated to the Secretary of State for the Colonies and that the Local Government be informed of the proposed action.

Mr. KENNEDY seconds the proposal which is supported by Mr. Ritchie and carried unanimously.

Mr. DUNCAN says that there was one more point in this connection to settle and that was what reply should be given to the Under Secretary's letter *re* the employment of assistant surgeons from Madras. It seemed to him that this question was liable to protract the meeting unduly and he recommends that the Standing Committee be authorized to reply.

Agreed to.

7.—RESTRICTION OF OUTPUT.

The SECRETARY reports having received a cable from the Rubber Growers' Association informing them that assents to the stipulated percentage of acreage to output control proposals had now been received and that they now approved of their approaching the local Government to enforce restriction generally.

He also reads the following letters :

"THE PARSONAGE,

"Kuala Lumpur, 11th February, 1918.

"SIR,

"I have the honour to request that you will bring the attached memorandum to the notice of the Planters' Association of Malaya at their next meeting.

"I have, etc.,

"(Sd.) ARTHUR CHAMPION.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"MEMORANDUM.

"We, the undersigned ministers of religion in Kuala Lumpur, desire to put on record our sympathy with the movement now in progress towards the abolition of Sunday labour on estates.

"Welcoming the increasing recognition of the fact that the exigencies of tapping no longer require work on Sundays, we would further submit that nearly all managers and assistants, a large proportion of the clerical and medical staffs, and a not inconsiderable number of coolies, are Christians: on whose behalf we would claim that a weekly day of rest and the opportunity of performing their religious duties on Sunday are privileges of which they have too long been deprived. In the case of all employees, whether Christian or otherwise, we believe that a weekly day of rest would be beneficial to mind and body.

"We therefore make an earnest appeal to the leaders of the planting community to come to an agreement on this question, which may result in united action being taken by planters with a view to closing down all estate work on Sundays.

"(Sd.) A. D. HARCUS,
G. F. PYKETT,
P. L. PEACH,
V. M. RENARD,
ARTHUR CHAMPION."

"SINGAPORE,

"22nd February, 1918.

"SIR,

"I have the honour to forward to you herewith a letter to the Council of the Planters' Association of Malaya on the subject of Sunday labour. The letter is signed by the Bishops of the Church of England and the Roman Catholic Church, by Bishop Robinson of the Methodists who is now in charge of the Methodist work in this Peninsula and by the Moderator of the Presbyterian Conference here.

"I notice in the newspapers that there is a meeting of the Planters' Association on Tuesday next. If the Council meets before that I hope they will be able to consider the letter; but should there be no Council meeting previous to the meeting of the Association, I hope that it may be considered at the Association Meeting itself, should the question of Sunday labour be raised.

"Believe me, etc.,

"(Sd.) C. J. SINGAPORE.

"THE SECRETARY,

PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

"SINGAPORE,

"22nd February, 1918.

"GENTLEMEN,

"We, the undersigned, representing the various religious bodies in British Malaya, desire to approach the Council of the Planters' Association of Malaya on the subject of the abolition of Sunday labour on estates.

"We understand that the state of circumstances caused by the war has made it a necessity to cut down the output on rubber estates. In many cases we are informed the very natural action is already being taken of abolishing Sunday tapping, while in some a Sunday holiday has long been established. We would ask the Council of the Planters' Association whether a recommendation cannot go out from them encouraging the keeping of Sunday on all estates as a day of rest.

"We would point out that nearly all managers and assistants, a large proportion of the clerical and medical staffs, and a fair number of coolies are Christian. We feel that in their case the privilege of having a weekly day of rest and the opportunity of performing their religious duties are rights which should be restored to them without delay. And even in the case of those employees who are not Christian we believe that a weekly day of rest is a social privilege which would be beneficial to mind and body.

"We would therefore make an earnest appeal to the leaders of the planting community to urge on all managers of estates in British Malaya the closing down of estate work on Sunday.

"We remain, etc.,

"(Sd.) E. BARILLON,
Bishop of Malacca.

WILLIAM CROSS,
*Moderator of Presbyterian
Conference.*

J. E. ROBINSON,
*Bishop of Methodist
Episcopal Church.*

C. J. SINGAPORE.

"To

"THE COUNCIL,

"PLANTERS' ASSOCIATION OF MALAYA.

"KUALA LUMPUR."

Mr. DUNCAN points out that the restriction of output was a very serious matter but he did not think that it therefore necessarily entailed a very lengthy discussion. As far as members of the Rubber Growers' Association were concerned, the matter was closed as they had had instructions to restrict output and he only hoped that all those who were not members of the Rubber Growers' Association would likewise join in this action which no doubt conferred great benefits on the whole industry. At the present time with shipping so restricted it was obviously of great importance that the amount of rubber placed on the market should likewise be restricted. Of the many ways suggested for carrying out such restriction, one was the stopping of all Sunday tapping. One advantage of this method was that it could be made generally obligatory which could not be said of others. In this connection he was glad to see the Bishop of Singapore present and he had great pleasure in inviting him to address them on the subject. The inhabitants of this country practised different religions, but if Sunday labour could be done away with, he felt sure that a very important point had been gained. He would therefore take first of all the question of Sunday labour and they afterwards could discuss further questions arising out of the Rubber Growers' Association restriction proposals, and he would now call upon the Bishop to address the meeting.

The BISHOP OF SINGAPORE is much obliged for being given the opportunity of speaking to the leaders of the planting community on the subject. He refers to the past history of this question in 1915, when he had mentioned the matter to the Rubber Growers' Association whilst in London, and this Association at their Annual Meeting in April of that year had discussed the matter and at a subsequent meeting resolved to drop the matter for the time being, but that as soon as practicable the introduction of stopping all

Sunday labour should be proceeded with. This time it seemed to him had now arrived. Among the arguments against the introduction was a statement that such cessation of Sunday labour would mean a 20 per cent. drop in outputs. As regards the rest of the remarks made by the member at the time he did not think that he had done justice to the planting community.

The point on which he based his arguments was that every man ought to have one day's rest per week and he quotes a leading article from the *Straits Times* which put the case very strongly and showed the unfairness of keeping the men in the tropics working seven days a week. He did not speak from a religious point of view alone, but from a philanthropic and social point. It had been proved again and again that people got stale by working day in and day out and in the munitions work now done in factories at Home it had been proved that workers on six days per week did as much as those working seven days. He had heard complaints were frequently made by planters about the monotony caused by perpetual work. Now that there was a practical opportunity for bringing in this measure it was much to be desired from all points of view, he thinks that the opportunity should be taken. There were two defects apparently and that was the work on estates employing Chinese coolies and those employing Mussulman coolies. As regards the first it seemed to him that if restriction was decided upon, the Chinese would not be asked and this method of restriction was not only good but cheaper than others. As regards Mussulmans, Johore had already set aside Friday as a day of rest and in any case the general run of estates employed Tamils and Chinese only and the proportion of Mussulman coolies was small. As regards Tamils, they had no regular day of rest and therefore they would neither hurt the religious susceptibilities of Tamils nor of the Chinese by fixing on that day of weekly rest which holiday was the day of rest for Christians throughout the world. Especially on behalf of the younger members of the planting community he would ask them to consider the subject seriously. If the argument was very strong in any country it was surely doubly so in this and as the Jews at the institution of the Sabbath had been reminded of the times in Egypt when they had been bond-men, he also would ask the present leaders of the planting community to remember the times when they had been assistants and creepers. (Applause.)

Mr. RITCHIE is glad to associate himself with all that the Bishop had said from all points of view. He strongly feels that the matter of output restrictions should be a matter for legislation and he welcomes the stopping of Sunday labour as part of what was to be decided upon in connection with output restrictions generally. As regards Chinese labour, he thinks the difficulty had been exaggerated as in his experience Chinese already took a few days off every month and that therefore the adherence of compulsory Sunday rest would be a small matter to Chinese. For the purpose of legislation it might be a disadvantage to put one day in seven instead of Sunday, but in any case, so far as Tamils were concerned there was no difficulty at all and he hopes that the meeting would agree to a proposal which he now begged to put forward—*viz.*, "that this Association approves in principle of the need for one day's rest in seven and that provision for making this universal be included if in

any way possible in whatever means taken for the reduction of output." Before resuming his seat he would like to express their thanks to the Bishop for having kindly come here to-day at great inconvenience and expense to himself and addressed them on this subject.

Mr. MOOIJART seconds Mr. Ritchie's proposal whose point of view he entirely endorsed and which, as a matter of fact, was the same as the one he took three years ago. He was fully aware that there were difficulties to be met in this connection but very grave difficulties had to be met in every method of restricting the crop and there seemed every reason why they should adopt this rather than any other method. There were two other points which he would like to mention to the meeting and that was that in Sumatra the law already enacted two holidays per month and, secondly, that there always loomed ahead over-production and he, therefore, would strongly urge them to adopt restriction of output by stopping Sunday tapping, although he was afraid that Mr. Milne's estimate of three years ago (20 per cent.) was too sanguine.

Mr. TATE reminds the meeting that when Sunday work was stopped on the Penang Wharves everybody predicted the speedy ruin of Penang and it was interesting to note that the Chinese coolies employed on the wharves readily acquiesced under the new regulation.

Mr. LATHAM considers that if Sunday work was stopped, toddy-shops should also be closed on Sundays.

Mr. CUMMINS opposes the idea of stopping work on Sundays. Even if no tapping was done, labour should be employed on other forms of work. If assistants wanted to go to church they could do so already and he would therefore propose an amendment that the Government be asked to legislate in order to restrict the rubber output of Malaya, but that the methods to be adopted for the purpose be left entirely in the hands of the managers.

Mr. RITCHIE would like to supplement his former remarks by saying that now was the time to introduce what was good in itself and that this would not prevent other methods being adopted as well.

Mr. DUNCAN believes that nobody present would care to controvert the views so ably expressed by the Bishop of Singapore. For himself he would eliminate altogether the question of religion and concentrate on the general desirability of the proposal and there seemed to him no question that its desirability was agreed to. The next point to consider was whether it was practicable to carry out. Now the fundamental attitude to such proposals in former times had always been based on the fact that to stop Sunday labour would reduce crops. The position to-day was that they were being obliged to find methods of restricting their outputs. He, personally, was entirely in favour of abolishing Sunday labour if it was practicable to do so and he suggests that if they all wanted to do it they could do it and the effects of such a step would be wholly good. He was quite in sympathy with the proposal of Mr. Ritchie seconded by Mr. Mooijart, but in view of Mr. Cummins' amendment and remarks he would suggest a further amendment on which he hoped they

could all unite—*viz.*, “that this Association express itself as in entire sympathy with the views which the Bishop of Singapore has to-day expressed on the subject of Sunday labour, and its members agree to endeavour as far as is possible and practicable to abolish it.”

Col. Fox enquires what information had been received as to what other rubber-producing countries were doing. If Malaya only was restricting crops, Sumatra, Java, Ceylon, etc., who were not doing so would get the benefit of their own self-denial. He must say, personally, he was entirely against making restriction compulsory by law.

Mr. RITCHIE withdraws his motion in favour of Mr. Duncan's amendment if unanimity could thereby be obtained.

Mr. JEAVONS observes that the question of Sunday labour should be treated entirely apart from the general restriction proposals.

Mr. BARBER points out that restriction of output did not necessarily decrease the economic value of an estate, as labour thus set free could be employed on other works of improvement but the abolishing of Sunday labour meant economic waste.

Mr. CUMMING enquires how delegates were supposed to vote. The members of their Constituent Associations were by no means unanimous on the subject and no instructions had been given to the delegates. In the circumstances he thinks it would be advisable to defer the matter.

Mr. KENNEDY seconds Mr. Duncan's proposal and urges everybody to vote for it as there was nothing binding in the resolution.

Col. Fox thinks that if it did not bind anybody, the resolution could not do any good either. He seconds Mr. Cumming's proposal that the question of Sunday rest be left to the next meeting of the Association so as to give Constituent Associations an opportunity to discuss the matter in the meantime.

Mr. MILNE strongly supports Col. Fox.

Mr. BENNETT is afraid that the abolishing of Sunday labour would raise the coolies' pay all round.

Mr. DUNCAN replies that his own enquiries on this point were entirely to the contrary. However, he had no doubt that nobody wished for a snatch vote and in view of Mr. Cumming's proposal he would withdraw his own and put Mr. Cumming's proposal as seconded by Col. Fox to the meeting. Before doing so he would like on their behalf to thank the Bishop of Singapore for having so disinterestedly come to this meeting and given them the benefit of his views.

Mr. CUMMING's proposal is then carried unanimously, and the meeting is adjourned from 1.30 to 2.30 p.m.

Mr. DUNCAN says the point before them now was whether the Association should approach the local Government with a view of making restriction compulsory. The Rubber Growers' Association had asked them to do so in the cable which had been read out earlier in the meeting and it was for this meeting now to authorize the Standing Committee to act. He thinks there was no need for them to consider to-day what form the restriction should take.

Mr. KENNEDY thinks that there are a number of bodies besides the Planters' Association of Malaya who had great interest in the rubber industry.—*viz.*, the Chambers of Commerce of the Federated Malay States, of Penang and of Singapore. It, therefore, would seem to him that they would make their case stronger if they joined with the representatives of these bodies to whom he would add the local Committee of the Rubber Growers' Association and the Chinese Chambers of Commerce, before going to the Government.

Mr. MENZIES disagrees with the Chairman and thinks that very much depended on the form of the restriction. As regards the Rubber Growers' Association method, it seemed to him iniquitous. Anyhow, Government could not stop people from tapping, for the only conditions under which land had been alienated for rubber planting were those of an export duty and of a payment of quit-rent and it was quite impossible now for Government to add a new condition. It seemed to him, therefore, that before they asked for legislation they ought to be agreed as to how it was to be done.

Mr. DUNCAN rules that the Rubber Growers' Association proposals were not before the meeting but only the question as to whether Government should be asked to help in carrying them out or not.

Mr. RITCHIE thinks that a large majority of those present to-day had or would shortly have instructions to reduce their outputs, but he was not at all clear what exact percentage of the total output of rubber from the Malay Peninsula this would represent. From calculations he had made he did not think that the Rubber Growers' Association assents represented more than 60 per cent. of the total rubber output in Malaya, and it appeared, therefore, natural that they should try and turn that 60 per cent. majority into something like a 85 per cent. majority—85 per cent. because he computed the output from small holdings at 15 per cent. But the only method of increasing the present 60 per cent. to 85 per cent. seemed to him to be by legislation. Personally, he favoured that legislative restriction should be worked through the issue of permits to export. He associated himself with Mr. Kennedy in advocating joint action with the Chambers of Commerce.

Mr. JEAVONS proposes that a Special Committee be appointed (1) to go into questions of how best to get others into line regarding the restriction of outputs, (2) to consider whether Government should be asked to make restriction compulsory, (3) the best method of restriction. He thinks it very important that Agents should be incorporated in this Committee and he therefore suggests that the Standing Committee approach the Chambers of Commerce in question and would then form this Special Committee as already suggested by Mr. Kennedy.

Mr. McCULLOCH recommends that this Committee be given power to act without having to refer their proposals back to the Planters' Association of Malaya which would mean the loss of two months.

Mr. CUMMINS enquires whether that would mean that the Committee as such would invite the Government to legislate or that such invitation would be given by the Committee on behalf of the Planters' Association of Malaya.

Mr. McCULLOCH replies that his proposal was only for the Committee to take action if they came to the conclusion that Government should not be asked to legislate but that in the contrary case the Committee be asked to refer the matter to the Planters' Association of Malaya.

Mr. RITCHIE then seconds Mr. Jeavons' proposal which is carried unanimously in the following form, "that a Special Restriction Committee be formed consisting of the Standing Committee of the Planters' Association of Malaya, of the Rubber Grower's Association Local Committee, and of representatives of the Committees of the Federated Malay States, Penang and Singapore Chambers of Commerce, with power to co-opt."

8.—CHINESE LABOUR.

The SECRETARY submits the following legal opinion obtained on the question raised at the last meeting:

"The case submitted to us is very vague but we gather that two Magistrates have refused to allow planters to prosecute coolies employed on their estates, but not employed by the managers of the estates themselves, but by contractors who have taken contracts for tapping from the managers.

"In such cases there is no contractual relationship between the manager and the cooly. The contract of employment is between the contractor and the cooly and the contractor can of course take proceedings against any cooly who breaks the conditions of his contract. The manager not being a party to the contract or agreement is not an employer within the definition given in section 4 of the Enactment and has nothing to do with a breach of the contract or agreement by the cooly. If however the contractor breaks his own contract or agreement with the manager, the manager can proceed against him civilly and, in some case at any rate, the contractor may come under the definition of a labourer and he may then be proceeded against criminally.

"We suppose in the present cases the offences alleged were absconding, careless work or the like and if so we have no doubt the Magistrates were right.

"With regard to the other point that the Labour Department insist on suitable lines for the contractor's coolies and proper hospital treatment and accommodation, we think the Labour Department are also right and that it is impossible for estates to contract out of their liabilities in these and similar respects.

"Our reason for this is that the coolies in question are 'labourers employed on the estate' within the meaning of sections 204, 205, 210, 212, etc. Note, the phrase is labourers employed on the estate. We think the Enactment was purposely drawn in order to make an estate liable not only for coolies employed by an estate but also for coolies employed on but not by the estate. Any other reading would enable an estate by employing contractors to escape from any liability to see to the health of the coolies, whilst it would be difficult, if not impossible, for Government to recover anything from the contractors who may be often are people in a small way of business. Hence by section 205 the employer or resident manager

is personally responsible if he without reasonable excuse, the proof whereof shall lie on him, fails to take or cause to be taken to hospital any labourer employed on the estate.

"We do not, therefore, on the facts before us, see any divergence between the views of the Medical, Labour and Judicial Departments.

"The opinion of

"FREEMAN AND MADGE,

"12th January, 1918.

"THE SECRETARY,

"PLANTEES' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

Mr. McCULLOCH remarks that employers of contractors had apparently only contracted out of their rights but not out of their duties.

9.—TELEPHONES.

"The SECRETARY reads the following correspondence :

"KUALA LUMPUR,

"29th December, 1917.

"SIR,

"I have the honour to acknowledge the receipt of your letter 969 of the 24th of October which was considered at a General Meeting of this Association held on the 19th instant.

"In reply I am to say that the condition of 100 subscribers rules out altogether a night telephone service at such places where owing to the isolation of the subscribers such service is most urgently required, and I am instructed to ask you kindly to reconsider your decision by making the conditions of a night telephone service less onerous.

"I have, etc.,

"(Sd.) H. C. E. ZACHARIAS,

"Secretary.

"DIRECTOR OF POSTS AND TELEGRAPHS, F.M.S.,

"KUALA LUMPUR."

"KUALA LUMPUR,

"12th January, 1918.

"No. 969/17.

"SIR,

"With reference to your letter of the 29th ultimo, I have the honour to inform you that the question of the provision of night telephone services at the smaller exchanges was most carefully considered by the Government before the decision communicated to you in my letter of the 24th October last was arrived at and I am unable to hold out hope of any modification of that decision.

"I have, etc.,

"(Sd.) C. H. ALLIN,

"Director of Posts and Telegraphs, F.M.S.

"THE SECRETARY,

"PLANTERS' ASSOCIATION OF MALAYA,

"KUALA LUMPUR."

10.—DISABLED OFFICERS.

The SECRETARY reports further particulars obtained as follows :

	No. engaged.	Still employed.	Left.
Negri Sembilan ...	19	13	6
Lower Perak ...	3	2	1
Taiping ...	4	1	3
Kuala Lumpur ...	8	6	2
Kelantan ...	5	3	2
Reported last meeting	50	33	17
	89	58	31

Mr. MOOIJAAET is of opinion that these figures seemed to justify his previous suggestion which he now would renew—*viz.*, that the Rubber Growers' Association be informed "that in the opinion of this Association a stricter medical examination was required of all candidates for planting billets who had been invalidated out of the Army by a doctor conversant not only with tropical countries, but also with the actual conditions under which these men would be expected to work.

Mr. DUNCAN seconds the proposal as it was obvious that these breakdowns in health were as bad for the individual as for the estates.

Mr. FERGUSON supports the proposal, which is carried unanimously.

11.—RUBBER LANDS RESTRICTION.

The SECRETARY reports that since the last meeting the Rubber Lands Restriction Bill had been passed with certain amendments urged by this Association and the Chambers of Commerce and had come into force as Enactment No. 1 of 1918 on the 17th of January, 1918.

12.—ASSISTANTS' SALARIES.

Mr. CUMMINS says that the point of minimum salary for assistants had been raised by the Kajang District Planters' Association who had gone very carefully into the whole matter and had worked out certain figures as follows :

Estimate of bare monthly cost of living for a new assistant, during his first year in the country.

Cook's wages ...	\$ 18.00
Boy's " ...	15.00
Tukang ayer—estate allowance ...	—
Food, kerosene and lamp upkeep, cleaning materials, etc., etc. ...	100.00
Dhobi ...	5.00
Tobacco ...	8.00
Personal drink (1 stengah per day) ...	10.00
Casual friends' drinks (10 stengahs per month) ...	3.00
Club (proportion of entrance fee) ...	2.00
„ monthly subscription ...	2.00
Carried forward ...	163.00

<i>Brought forward</i> ...	\$163.00
<i>Club games subscription</i>	2.00
„ <i>drinks</i>	3.00
<i>Clothes—see separate list</i> ¹	16.00
<i>Charity—one day's pay (\$200)</i>	6.50
<i>Stamps, telegrams, etc.</i>	1.00
<i>Upkeep on house linen, lamps, etc. (see note)</i> ²	3.00
<i>Books, papers</i>	2.00
<i>Volunteering</i>	1.00
<i>Tooth brushes, etc. (see separate list)</i> ³	1.50
<i>Cushions, photos, etc.</i>	1.00
Total ...	\$200.00

¹ CLOTHES.

Allowing the man brings out sufficient "store clothes" to last one year.

Six khaki suits	\$ 36.00
Eighteen singlets	30.00
Four tennis shirts	10.00
Three pairs white trousers	7.50
Five sarongs and bajus	15.00
Twelve pairs estate socks	12.00
Six „ thin socks	6.00
Two dozens handkerchiefs	5.00
Six collars	2.50
Braces, belts, sock suspenders	5.00
One tie	1.00
Four pairs estate boots	18.00
One pair leather „	18.00
„ pumps	10.00
„ tennis shoes	3.50
Boot repairs	4.00
One topee	10.00
Studs, buckles, buttons, etc.	3.00
Total ...	\$196.50

= say \$16.00 per month.

² This \$200 allows that the estate supplies house linen, crockery, cutlery and all necessary furniture—*e.g.*, mosquito nets. It also allows no contingencies—*e.g.*, dentist, insurance, church subscriptions, charities other than one day's pay, visits, travelling, etc.

³ TOOTH POWDER, ETC.

Two tubes tooth paste	\$ 1.50
Four tooth brushes	2.50
One shaving brush	2.00
Three sticks shaving soap	1.80
Toilet and carbolic soft soap	5.00
Toilet paper	3.50
Sponge	2.00
Total ...	\$ 18.30

= say \$1.50 per month.

This estimate he considered absolutely reliable and accurate and if \$200 was the minimum living wage it was not good for the planting community to get out men from Home at a smaller salary. He therefore would propose "that in the opinion of this Association the minimum living wage for an Assistant out from Home at the present time is \$200 per mensem and that the Secretary be instructed to communicate with the Rubber Growers' Association accordingly.

Mr. DUNCAN seconds the proposal and says that he had already made enquiries and found independently that at the present time it was not possible for anybody to live on less than \$200 per mensem and salaries in the Companies with which he was connected had been increased accordingly.

The proposal is carried unanimously.

13.—DEPARTMENT OF AGRICULTURE.

The SECRETARY informs the meeting that he had received from Mr. F. G. Harvey notice of the following proposal: "That this Association desires to place on record its appreciation of the work of the officers of the Department of Agriculture, Federated Malay States, in connection with the Locust Pest."

Mr. JEAVONS in the absence of Mr. Harvey has great pleasure in moving the resolution and testifying to the good work of the Department which had resulted in the total disappearance of locusts from Selangor.

Mr. McCULLOCH seconds the motion and says that the same results had been obtained in Negri Sembilan.

The proposal is carried unanimously.

14.—AGENDA.

Mr. CUMMINS says that the agenda as at present sent out conveyed little information to the members and suggests that more intelligent interest would be taken in the affairs of the Association if a copy of all correspondence, etc., to be dealt with at the next meeting was attached to the agenda. This would give Constituent Associations an opportunity to discuss all subjects thoroughly and instruct their delegates accordingly. At present many delegates came to these meetings without knowing anything about some of the subjects down on the agenda. If this plan was adopted he thinks that a good deal of time and discussion would be obviated, and he understands from the Secretary that the extra cost would by no means be prohibitive.

Mr. MOOIJAART seconds the proposal. He had often found the discussion inclined to flag because people did not know very much about the subjects under discussion and he was all in favour of promoting a more general interest.

Mr. PRIOR cordially supports the proposal, which is carried unanimously.

15.—RULES.

Mr. JEAVONS gives notice that at the forthcoming Annual Meeting he proposes to move an amendment to rule 5.

16.—GENERAL.

The SECRETARY in reply to a question says that he understands that the Hon'ble Mr. R. C. M. Kindersley was standing as a candidate for the Chair for the ensuing year and reminds all Constituent Associations that nominations should reach him by the 15th of March.

Mr. CUMMINS moves a vote of thanks to Mr. Duncan for so ably presiding, which is carried with applause.

Mr. RITCHIE wishes to express the thanks of the Association for the invitation of the Malay Peninsula Agricultural Association and their great pleasure for having had the opportunity of meeting them at a meeting so successfully attended.

The meeting terminates at 3.30 p.m.

H. C. E. ZACHARIAS,
Secretary.

District.	Mean Barometrical Pressure at 32° Fah.	Maximum in Sun.	TEMPERATURE.				HYGROMETER.				Prevailing Winds.	Total Rainfall.	Greatest Rainfall dur- ing 24 hours.
			Mean Dry Bulb.	Maximum.	Minimum.	Range.	Mean Wet Bulb.	Vapour Tension.	Dew Point.	Humidity.			
Kelantan, Kota Bharu ...	...	150.0	81.1	90.2	72.9	17.2	76.4	.818	73.2	77.0	...	4.27	1.54
Pahang, Kuala Lipis ...	...	...	80.77	88.26	73.22	15.03	75.61	...	...	...	...	7.76	1.24
Johore, Johore Bahru ...	...	...	...	88.24	73.32	...	...	...	...	...	...	4.49	...
Singapore, Kandang Kerbau ...	29.780	162.0	83.3	88.1	74.1	14.0	77.3	.847	...	76.3	...	7.91	2.00
Malacca, Durian Daun ...	29.831	170.0	82.0	90.0	69.5	14.9	78.3	.928	...	83.0	S.W.	13.58	2.61
Negri Sembilan, Seremban ...	...	154.1	80.6	87.2	70.8	16.4	75.6	.859	76.4	84.5	N.W.	10.54	2.40
" Kuala Pilah ...	...	144.0	81.2	88.9	70.7	18.2	78.3	.923	76.4	86.9	...	8.22	1.33
" Port Dickson ...	...	121.5	81.4	86.3	73.8	12.5	77.1	.850	74.3	79.4	...	10.83	2.09
Selangor, Kuala Lumpur ...	29.875	142.0	81.2	88.4	72.8	15.6	76.5	.823	73.5	78.0	N.E.	5.92	2.73
" Klang ...	...	...	80.6	85.3	74.2	11.1	75.9	...	...	...	...	8.01	2.45
" Kuala Selangor ...	...	...	...	88.0	74.8	13.2	...	...	...	...	...	4.67	1.35
" Rawang ...	...	...	...	92.5	...	...	...	...	...	...	...	4.58	2.85
Perak, Telok Anson ...	...	...	82.20	92.0	70.0	22.0	77.52	.882	...	81.0	...	4.37	1.85
" Ipoh ...	...	...	81.70	94.0	70.0	24.0	76.01	.824	73.41	77.0	...	6.57	1.45
" Taiping ...	...	112.0	81.79	97.0	61.0	36.0	76.49	.840	...	78.0	...	6.18	1.29
" The Cottage ...	...	...	...	...	...	...	...	...	...	...	...	13.97	2.28
" Parit Buntar ...	...	...	82.61	92.0	71.0	21.0	77.48	.873	...	79.0	...	4.72	2.36
Penang, Georgetown ...	29.731	142.4	81.9	86.5	71.6	...	79.3	.981	77.53	93.2	N.	11.37	1.73
Kedah, Alor Star ...	...	...	...	...	...	...	...	...	...	...	...	10.43	2.27
Perlis, Kangar ...	...	...	...	87.48	73.26	14.22	...	...	...	...	...	11.14	7.18

